CONSTRUCTION NEWS

Supplement to ENGINEERING NEWS. New York, March 25, 1909.

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CONSTRUCTION NEWS.

Plans and Specifications on File.

(* *denotes that this work is advertised in Engineering News.*)

The following plans (P.) and Specifications (S.) are on file and may be seen at office of The Engineering News Publishing Co., 220 Broadway, New York.

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RAILWAYS.

ABBEVILLE & PORT BARRE.—Engineers have completed survey to Abbeville, La., and retraced to Broussard and Breaux Bridge. It is stated that this line will leave the main line of the Texas & Pacific Ry. at Port Barre, La., and run to Breaux Bridge, where a line will be built to New Iberia and one to Abbeville and possibly south to the Gulf coast.

ALBERTA & GREAT WATERWAYS.—J. A. L. Waddell, Consult. Engr., New Nelson Bldg., Kansas City, Mo., has been retained to do the engineering work for this line. Survey parties will be in the field at once. The northern terminus will be Fort McMurray, in the lower reaches of the Athabasca River. The route from Edmonton will run north by east, a distance of 125 miles, to a point west of Lake La Biche, and thence in an almost straight line to Fort McMurray. It is proposed to build a branch line of 30 miles to a rich farming country in the Lake La Biche country and possibly other branch lines, including one from that lake, of almost similar length, to tap the head of navigation on the upper reaches of the Athabasca River which flows north. This branch line will give communication with the Lesser Slave Lake district. Noted on March 4.

CANADIAN, LIVERPOOL & WESTERN.—S. G. McClenahan, of Montreal, Que., T. B. Rankin, George S. May, William Johnson and Donald G. Stewart, of Ottawa, Ont., are seeking incorporation for this line with powers to build east and west across the Province of Quebec, to connect with the Trans-Continental and also with some port on the Atlantic. The application also provides that the company may distribute electricity.

CHESAPEAKE & OHIO.—An extension is contemplated from Peyton, W. Va., to Jerrold's Valley to connect with the Cabin Creek branch, 23 miles. It is stated that a branch will be built from Surveyor, W. Va., on Piney Branch, to Marsh Fork, 80 miles, to connect with the Cabin Creek road. H. Pierce is Engr.-of-Constr., at Richmond, Va.

CONTINENTAL MIDLAND.—Contract has been let to J. T. ADAMS, 810 Columbus Savings & Trust Bldg., Columbus, Ohio, for constructing this railway, from Edgeley to Pembina, N. Dak. The contract includes 200,000 cu. yds. of earth excavation, about 600,000 cu. yds. of embankment, a small number of bridges and about 6,000 cu. yds. of concrete masonry. Contracts for grading, bridging and concrete work will be sub-let about April 15.

ENID, OCHILTREE & WESTERN.—We are officially advised that it is expected to let contracts at once and to begin construction work by April 1 and to have the first 35 miles finished in three months, with average of 3,000 cu. yds. per mile. The railroad will run from Dalhart, Tex., to Dumas, Hansford and Ochiltree, 113 miles. Townsite work is now in progress. Surveys have been made, capital secured and right-of-way obtained. Geo. M. Perry is Pres., Ochiltree, Tex.; H. H. Rodgers is Ch. Engr., Quanah, Tex. Noted on Jan. 21.

GILMORE & PITTSBURG.—A contract for construction of seven miles of railway has been awarded MACARTHUR BROS., Fisher Bldg., Chicago, by this company, and the work will be started immediately. The contract calls for an expenditure of over $3,000,000. The section contracted for extends from Armstead, Mont., to Salmon City, Idaho. There is to be a 700-ft. tunnel. The work is being sub-let by John Duffy, at Dillon, Mont. W. A. McCutcheon is Pres.; T. H. Bacon, Machesney Bldg., Pittsburg, Pa., is Ch. Engr. Noted on Jan. 28.

HUDSON BAY RY.—A preliminary report has been received from the surveyors sent out by the Canadian Government to determine the cost and practicability of building a line of railway to Hudson Bay. The surveyors report that a line could be built to either Fort Churchill or Port Nelson on Hudson Bay and that the cost would be, with terminal and harbor works, between $17,000,000 and $18,000,000. The report favors the line to Port Nelson because the line would be about 60 miles shorter to Winnipeg and because the country traversed is better for agriculture and because that port is ice-free for a month longer, having an open season of about six months in a year. The report makes the statement that a canal would be built along the Nelson River, which would enable ocean-going vessels to enter Lake Winnipeg from Hudson Bay. The distance from Port Nelson to Winnipeg is 379 miles. The Canadian Government will take no step toward construction until further evidence is obtained that Hudson Straits are open for navigation for a sufficiently long period each year to warrant the establishment of steamship lines. John Armstrong is Ch. Engr., Ottawa, Ont. Noted on Oct. 29.

IOWA & OMAHA SHORT LINE.—Contract has been let by this company to GEORGE W. ADAMS, of Walnut, Iowa, for constructing 15 miles between Council Bluffs and Treynor, Iowa. The projected length of this road is 135 miles and the route is from Council Bluffs to Treynor, Oakland, Atlantic, Guthrie Center, Dallas Center and Des Moines, Iowa. Surveys have been made and part of the capital for construction secured. J. H. Mayne, Walnut, is Ch. Engr., and George W. Adams, Walnut, is Pres.

JOPLIN, OKLAHOMA & WESTERN.—Company has made surveys, secured capital and will let contracts for a railway 260 miles long. The route is from Joplin, Mo., through Miami, Welch, Centraline, Bartlesville, Pond Creek, Ponca and Carmen, Okla. J. E. Gillespie, Welch, Okla., is Western Mgr.; H. H. Jackman, Welch, is Ch. Engr.

KEWEENAW CENTRAL.—A spur, twelve miles long, probably will be built from Mandan, Mich., to Fischer Bay. C. A. Wright, Hancock, Mich., is Pres.; F. E. Simar, Hancock, is Ch. Engr.

LONDON & NORTH WESTERN.—Application has been made to incorporate this company to build from London, Ont., west to Sarnia, Ont., passing through the townships of Lobo, East Williams, Adelaide, Warwick, Plympton and Sarnia; also from London to a point on Lake Huron, passing through the townships of East Williams, West Williams, McGillivray, Stephen, Hay, Stanley and Goderich, and with power to build branch lines not longer than 15 miles, and not to extend beyond the limits of the counties of Middlesex, Lambton or Huron. Authority is being sought to build and operate telegraph and telephone lines, etc., also such work to be declared for the general advantage of Canada. Ivey & Dromgole, London, Ont., are Solicitors.

NORFOLK & WESTERN.—Double track will be constructed along the Scioto Division in Ohio, between Kenova and Columbus, 32 miles, and seven miles in West Virginia, between Hull and Wyoming. Contracts for a portion of this work are to be awarded soon,

it is stated. A part of the double-tracking in Ohio is to be done by the company's force, including the steam shovels and other equipment. The seven miles in West Virginia will be let to contract. C. S. Churchill, Roanoke, Va., is Ch. Engr.

QUANAH, ACME & PACIFIC.—It is announced that contract has been let to the JOHNSTON CONSTRUCTION CO., St. Elmo, Ill., for building the line from Acme to Paducah via Quanah, 60 miles in length. As noted on Feb. 18, the Acme, Red River & Northern Ry. Co. has filed an amendment to its articles of incorporation in Texas, changing its name to the Quanah, Acme & Pacific Ry. Co., and its capital stock was increased from $25,000 to $70,000. The amendment also provides for an extension of the road an additional 50 miles. The present length of the road is twelve miles, from Quanah to Acme and from Salina to Acme. The extension is to be 50 miles, beginning on a west line of Quanah, into Cottle County and through Hardeman County. Chas. H. Sommer is Vice-Pres. and Gen. Mgr., St. Louis, Mo. F. M. Sands is Gen. Supt., Quanah, Tex. The PACIFIC CONSTRUCTION CO., St. Louis, is general contractor.

SALEM, FALLS CITY & WESTERN.—Construction work on the extension of the Salem, Falls City & Western from Dallas to Salem, Ore., a distance of 14 miles, will be resumed April 1. Louis Gerlinger, Pres., Portland, Ore., is moving construction machinery to the ground to carry forward the work as soon as the weather settles. Right-of-way have been secured for the entire distance. About three miles of the extension has been graded. Terminal sites for the line have been purchased at West Salem on the banks of the Willamette River opposite Salem in Polk County. B. S. Taylor, Dallas, Ore., is Ch. Engr.

TEXAS SHORT LINE.—Company has awarded contract to the TRULY-WHITE CONSTRUCTION CO., 2124 West Commerce St., San Antonio, Tex., for constructing the extension from San Antonio to Fredericksburg, Tex. None of the work has been sublet as yet. The contract includes grading about 100 miles of line, tracklaying and rolling stock equipment. A tunnel about one-half mile long through limestone is included in the contract. The contract also includes seven bridges, some wood trestles, several pie bridges and a small amount of concrete and stone masonry. H. S. Shaner is Pres. and Ch. Engr., San Antonio.

ELECTRIC RAILWAYS.

BROOKLYN, N. Y.—Joseph J. Baughman, New Cumberland, Pa., an incorporator of the South Flatbush St. R. R. Co., advises us that construction contracts will be let about April 15. As noted on Jan. 14, this company, with $30,000 capital, has been organized to operate a street surface electric road three miles long from the Brighton Beach line to the Brooklyn Union Elevated Railroad Co. at Ave. Q to Ave. Q and Flatbush Ave., Borough of Brooklyn. Right-of-way is secured, capital obtained and survey made. J. C. Langan, 178 Remsen St., Brooklyn, is Pres.; Geo. H. Gifford is Ch. Engr.

ELIZABETH, N. J.—The following officers were elected at a recent meeting of the directors of the Traction Development Co., which has charge of preliminary work for the Elizabeth & Amboy Traction Co.: Richard F. Pettigrew, Pres.; Richard M. Montgomery, Vice-Pres.; Robert D. Murray, Secy. and Treas.; J. A. Strausman, Asst. Secy. and Treas.; Percival S. Jones, 27 Pine St., New York, N. Y., Counsel. It has been decided to take steps at once for the beginning of work on the projected railway. The Elizabeth & Amboy Traction Co. proposes to operate an electric railway from Elizabeth to Linden, Rahway, Cartaret, Chromé, Port Reading, Sewaren, Woodbridge and Perth Amboy. Engineers are at work surveying the routes and providing for right-of-way. The principal routes have been selected. Noted on Feb. 4.

HAZELTON, PA.—The Susquehanna & Southern R. R. Co. has been formed for the purpose of building a third-rail railway from Hazelton to Pottsville. The surveys have been completed, and it is stated that the work of building the railway will begin in the spring. Terminal rights have been secured at Hazleton and Pottsville. The railway is to be 32 miles long and will pass through Audenried, McAdoo, Lofty, Delano, Mahanoy City, Morea, Buck Mountain, Frackville and St. Clair, from which place it will enter Pottsville and connect with the Schuylkill Valley Traction Co. It has not yet been decided whether the company will erect its own power station or buy its current from the Harwood Power Co., which is erecting a plant at Harwood.

READING, PA.—Application will be made by the Inter-County Elec. Co. for a charter for this company, which proposes to construct an electric railway from Reading to Allentown, via Lyons and Tipton, 35 miles long. Capital stock, $500,000. Directors: Maxwell H. Bochow, George F. Souwers, Bateman Saddington, Josiah H. Fisher and Frederick R. Perry. As noted on March 4, M. H. Bochow, Pres., advised us that this company would let contracts probably in about 30 days for building its line.

DUQUESNE, PA.—The Duquesne & Dravosburg Street Ry. Co., it is announced, will apply for a charter to construct a street railway in the Borough of Duquesne and Miflin Township. It is also proposed to build to Dravosburg and West Elizabeth. Directors: A. J. Krill, John C. Cato, T. F. Vankirk and Charles McGinley.

JOHNSON CITY, TENN.—The Austin Springs Ry. Co. has been organized to build a railway between Johnson City and Austin Springs, a distance of about five miles. Surveys have been made and contracts placed for the rails. It has not yet been decided what motive power will be used. J. B. Cox, Johnson City, is interested.

MEMPHIS, TENN.—Arrangements are being made by John B. Wheeler for the construction of an electric railway from Memphis to Jackson. A survey has been made as far as Covington, nearly paralleling the Illinois Central R. R., and extending through Woodstock, Rembert Springs, Millington, Kerrville, Munford and Melrose to Covington. Headquarters, the Lee Building, Memphis.

LEXINGTON, KY.—We are officially advised that the Central Kentucky Traction Co. has received bids for building a 12-mile extension from Lexington to Nicholasville. Surveys have been made, right-of-way obtained and capital for construction secured. George MacLeod, Lexington, is Ch. Engr.

WAUKEGAN, IND.—R. D. Wynn, Gen. Mgr. of the Waukegan, Rockford & Elgin Traction Co., Waukegan, advises us that contracts for building the first five miles of this line will be let in April. The railway will run from Waukegan west to Rockford and southwest to Elgin, 76 miles. Right-of-way is now being obtained. Surveys are being made. John D. Pope is Pres., and Harry J. Fermer is Ch. Engr., Waukegan.

EAST ST. LOUIS, ILL.—We are officially advised that construction contracts will be let in about 60 days by the East St. Louis, Columbia & Waterloo Ry. Co. It has completed its surveys and the right-of-way is partly secured for its proposed electric road, which is to be built from East St. Louis through Dupo, Bixby, East Carondelet, Columbia and Waterloo, Ill. Headquarters, Columbia, Ill. E. F. Schoening is Pres., Columbia, Ill.; Baxter L. Brown, 610 Laclede Bldg., St. Louis, Mo., is Ch. Engr.

PARIS, ILL.—The Paris & Northern Ry. has been incorporated for the purpose of building an electric railway from Ridgefarm to Paris, connecting the traction systems of Illinois with those of Ohio and Indiana. It is reported that the company has completed the surveys and is now at work securing the right-of-way. Principal office, 115 North Vermilion St., Danville, Ill. Capital stock, $5,000. W. M. Bridgett, R. C. Parks, L. C. McGee, George G. Roland and Charles Troup are directors.

CHICAGO, ILL.—An ordinance granting the Kensington & Eastern Railroad Co. a 20-year franchise was defeated by the City Council. Following the defeat of the measure permission was obtained to reintroduce it as new matter, and it was sent back to the Transportation Committee. The company proposes to construct an electric railway, eight miles in length, between the Illinois Central Railroad at Pullman and the Chicago, Lake Shore & South Bend Railway at Hammond, Ind.

ROCKPORT, TEX.—The Rockport & Aransas Pass R. R. Co. has been chartered to construct an electric railway from Rockport to the jetties at Aransas Pass, a distance of 11½ miles. Capital stock, $11,500. Incorporators are C. G. Johnson, Harry Traylor, D. R. Scrivener and W. H. Baldwin, of Austin, Tex.

FORT WORTH, TEX.—We are officially advised that the Southern Traction Co., which will build an interurban railway from Fort Worth via Everman, Burleson and Joshua to Cleburne, Tex., 28 miles, will let contracts about April 1. Surveys have been completed and right-of-way partly obtained. F. H. Peters is Pres., 28 Dundee Bldg., Fort Worth. B. G. Leake is Ch. Engr., Dundee Bldg., Fort Worth.

SHERMAN, TEX.—J. P. Hornaday & Co., 30 Church St., New York, advise us that construction contracts will be let about April 1 for building the line of the Gainesville, Whitesboro & Sherman Electric Ry., construction work on which was started two years ago. Line will be operated by gasoline or electric power. Previously noted.

EUGENE, ORE.—Surveys have been started by the Lane County Asset Co., recently organized at Eugene, to build an electric railway over the county roads from Eugene to Florence. The franchise granted the company by the Commissioners' Court of Lane County provides that the survey be completed within 90 days from the granting of the franchise; 15 miles of the road must be completed in the first year, 25 miles the second year and the entire road built within three years. The applicants for the franchise were George M. Miller, J. W. Zimmerman, Charles H. Fisher and Fred Fisk, all of Eugene. Noted on Feb. 18.

OGDEN, UTAH.—We are officially informed that the Ogden Rapid Transit Co. has awarded contracts to WEST & BATEMAN, Ogden, Utah, for building its proposed electric line through Ogden Canon to Huntsville, in Ogden Valley, twelve miles. Surveys have been run, right-of-way obtained and capital secured. David Eccles is Pres., and Jos. A. West, Ch. Engr., Ogden.

LONDON, ONT.—Surveys of the North Midland Ry. have been completed, and it is expected that construction will begin this spring. The line will connect Lucan, Granton, St. Marys, Stratford and London, Ont., and will be about 45 miles long. The road will be bonded for $25,000 per mile. Capital stock, $1,000,000. W. Scarlett, 169 Dundas St., London, Ont., Pres.; T. H. Lascombe, London, Secy.; A. E. Welch, London, Gen. Mgr.

LIGHT AND POWER PLANTS.

*(*denotes that this work is advertised in Engineering News)*

PITTSFIELD, ME.—The Hessalonskee Electric Co., Waterville, Me., has purchased the controlling interest in the Sebasticook Power Co. of Pittsfield. The plant is located about five miles below Pittsfield, on what is known as the Thirty Mile Rips, and has an output of about 1,500 HP. The power house is equipped wtih an auxiliary steam plant, with a rating of 400 HP. The company also has a large substation in this town. The new owners will continue to furnish electrical service as before and also agree to furnish electricity for industrial purposes and early in the spring propose to erect a transmission line 16 miles long from its new plant to Waterville, where it is proposed to utilize electricity from this plant with other plants owned by the company, to be used for lighting purposes and for operating the Lewiston, Augusta & Waterville Electric Ry. The Messalonskee Electric Co. now has three electric plants under its control, the original plant in Oakland, with an output of 1,000 HP. and the Fort Halifax Power Co.'s plant in Winslow of 2,000 HP. and the Pittsfield plant.

CAMBRIDGE, MASS.—Arrangements are being made by the Charles River Building Co. for the construction of 22 8-story warehouse and mercantile buildings on the Charles River in Cambridge. A central power plant with a rating of 5,000 HP. to furnish electricity for light, heat and power will be erected in connection with the project. Henry T. Anglim is Pres.; Frederick J. Anglim, Vice-Pres. and Secy., and William J. Anglim, Treas., all of Brockton, Mass.

SPRINGFIELD, MASS.—The members of the Springfield Power Associates are contemplating extensive improvements to the property of the steam power company, recently purchased. The association has purchased a site of about 3½ acres, on which it will erect an 8-story building to be utilized for manufacturing purposes. The motive power will be changed from steam to electricity, at a cost of about $50,000. Cost of improvements contemplate, about $200,000.

BLOOMSBURG, PA.—The Columbia Power, Light & Railways Co., Bloomsburg, will place contracts during the next month for the building of a 25-mile, 23,000-volt, 3-phase transmission line, with about 2,000 KW. of power transformers, lightning arresters, etc, and will also install a 500-HP. hydraulic turbine, a 300-KW. railway generator and a 200-KW. belted railway generator, with switchboard, etc.

JOHNSTOWN, PA.—We are officially advised that the Johnstown & Gallitzin Ry. Co., of Johnstown, Pa., will receive bids about June 1 for steam power plant equipment to be located near St. Michaels. It will generate current at about 13,000 volts with two units of 750 KW. each. One substation will be located at the main power station, which is approximately the center of distribution system near South Fork, Pa., and an additional sub-station will be built at each end of the line. Current will be transformed and stepped down at the substations to 600 volts, direct connected, as the company proposes to operate cars for a distance of 2¼ miles over the Johnstown Passenger Ry. George Holman, Suppes Bldg., Johnstown, Pa., is Engr. and Gen. Mgr. Estimated cost, $93,000. Noted on Feb. 18 and March 11.

*WILKES-BARRE, PA.—Bids are asked by the City School District until noon, April 26, for boilers, breeching and stack; power plant equipment and heating and ventilating system; electrical work, for high school at Wilkes-Barre, Pa. A. E. Burnaford is Pres. School Bd.

WASHINGTON, D. C.—Bids are asked at the office of the Disbursing Clerk, Dept. of Agriculture, Washington, D. C., until March 26 for furnishing and installing an electric generating unit and mechanical stokers. James Wilson is Secy.

CLARKSVILLE, VA.—It is stated that the Southern Traction & Power Co., which proposes to construct hydro-electric plants on Dan and Staunton Rivers, several miles north of Clarkesville, is planning to develop 20,000 HP., which will be transmitted to Danville, Va.; Burlington, Graham and Haw River, N. C., and probably to Reidsville, N. C. Junius H. Harden, Secy. of the Burgrahaw Traction Co., of Burlington, N. C., is interested.

WADESBORO, N. C.—A. H. Richardson, 500 North Pine St., Charlotte, N. C., is having surveys made with a view to developing water-power property near Wharftown. A canal half mile long will give a fall of 150 ft.

SPARTANBURG, S. C.—The city has awarded the contract for street lighting to the ELECTRIC POWER & MFG. CO. for a term of ten years. The company proposes to make improvements to its steam power plant, which will be used as an auxiliary plant. Additional arc lamps will be installed. F. H. Knox, Pittsburg, Pa., is Gen. Mgr.

ATLANTA, GA.—James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., has awarded contracts as follows for work in connection with the new post-office at Atlanta, Ga.: CHARLES McCAUL CO., Tenth and Sansom Sts., Philadelphia, heating apparatus, $36,300; PIEDMONT ELECTRIC CO., Asheville, N. C., conduit and wiring system, $12,085. Time to complete, Sept. 1, 1910. A complete list of bids was given on March 4.

WHITE SPRINGS, FLA.—Active preparations are being made by the Suwannee River Electric Power Co., for the construction of a power plant and dam at the Suwannee River shoals near White Springs. W. B. Owen is Pres.

ALEXANDER CITY, ALA.—The Big Hillabee Power Co. incorporated to develop power of Big Hillabee Creek at Lindsey Shoals, six miles from Alexander City, will furnish light and power in Alexander City. L. W. Robert is Pres.; J. W. Preston, Jr., Vice-Pres. and Gen. Mgr., Alexander City; L. W. Robert, Jr., Secy. and Treas.; Park A. Dallis, Lagrange, Ga., Ch. Engr. Headquarters, Candler Bldg., Atlanta, Ga.

HOUMA, LA.—The Board of Alderman of Houma has awarded the contract for erecting a building for the municipal electric light plant to WILLIAM WATKINS.

CINCINNATI, OHIO.—L. P. Hazen & Co., 1610 Reading Road, contemplate construction of a combined power-house and storage warehouse, work on which will begin soon. Cost, $125,000.

SPRINGFIELD, OHIO.—Plans are being prepared by the Springfield Light, Heat & Power Co. for construction of the proposed addition to its plant on West Jefferson St. The company proposes to extend its transmission lines for both [illegible]ting and power service and to extend [illegible] heating system. Charles S. Kay, Springf[illegible] is Mgr.

ORLAND, IND.—Rober[illegible] Sanderson contemplates installing an [illegible] plant in his mill, it is stated, and w[illegible]nish electricity for lamps in this town. [illegible] village authorities have decided to ins[illegible]ctric lamps on the streets.

HAMMOND, IND.—Th[illegible]thern Indiana Gas & Electric Co. is pr[illegible] to erect and equip a new generating [illegible] in this city.

HOUGHTON, MICH.—[illegible]s of incorporation of the Norther[illegible]higan Power Co., organized to dam [illegible] waters of the Sturgeon River and dev[illegible] power to be sold in various adjoini[illegible]ounties, have been filed at Houghton. [illegible] incorporators are given as Dean L. R[illegible]n, James D. Looney and Elsworth M. [illegible]m. The company is capitalized at $5[illegible] there being 5,000 shares at $10 each. [illegible]ompany will operate in the Counties o[illegible]aga, Houghton, Ontonagon, Marquett[illegible]n Dickinson and Gogebic. The head [illegible] will be in Houghton and the life of [illegible] company is given at 30 years in the a[illegible]. Sturgeon River, which it is propos[illegible] dam, is located in Houghton and Bara[illegible]ounties, but the intention of the compa[illegible] to develop power and dispose of it in [illegible] counties as well as the others named.

PINE CITY, MINN.—Bid[illegible] asked by the Pine City Electric Power [illegible] until April 10 (an extension of time [illegible] March 10) for construction of its propo[illegible] plant. The company proposes to develop [illegible] water power of Snake River, about se[illegible] miles from Pine City, and to erect tra[illegible]ssion lines to Hinckley and Rush City. J. M. Allen is Mgr.

MANDAN, N. DAK.—The M[illegible]n Electric Co. contemplates remodeling [illegible] enlarging its plant. No definite plans ha[illegible] been made except the purchase of two bo[illegible]rs. It is proposed to change the system from single to three-phase. B. K. Skeels is Purchasing Agent.

WAGNER, S. DAK.—We are officially advised that the Dakota Gas, Electric Light & Power Co., Wagner, S. Dak., has purchased from the MINNEAPOLIS STEEL & MACHINERY CO., of Minneapolis, Minn., an 80-HP. Muenzel producer gas engine and suction gas producer plant. This outfit will be installed in the electric light plant at Wagner.

MISSOULA, MONT.—Water rights have been purchased by the Idaho Water & Electric Power Co., a concern subsidiary to the Chicago, Milwaukee & Puget Sound R. R. Co., for the purpose of developing the water power of the Missoula River at points immediately tributary to the Puget Sound line. The initial purchases of property upon which to establish electric plants has been about five miles east of Fish Creek, at the Rock Cut Rapids of the Missoula River. According to reports, plants will be established along the Missoula and St. Joe rivers for the purpose of generating power with which to operate the new Pacific Coast extension through the Bitter Root Mountains. This electrified section will extend from St. Regis, Mont., to St. Joe, Idaho. The plants will be 20,000 to 25,000 HP. The district from St. Regis to St. Joe is 100 miles in length and tributary to it are many mountain streams capable of supplying power.

PORTALES, N. MEX.—Plans have been completed for construction of an electric light plant and water-works system in Portales, to cost about $50,000. Burns & McConnell, Scarritt Bldg., Kansas City, Mo., are Engrs.

SPOKANE, WASH.—The Washington Water Power Co. is arranging to build a 60,000-volt, high tension power line from the sub-station at 29th St. to the new power station at Little Falls.

BELLINGHAM, WASH.—The power plant at Nooksack Falls, owned by the Stone & Webster Co., will be enlarged, it is stated, to meet the increased demand for electricity in this city. J. B. Lukes is District Supt.

MONTAGUE, CAL.—The Siskiyou Electric Light & Power Co. will commence work soon on the construction of its proposed power plant on the Klamath River at Ward's Canyon. The plant will be capable of developing 64,000 HP. and will require three years to build it.

BAKERSFIELD, CAL.—An electric power plant is projected on the Kern River near Bakersfield, Cal., it is stated. It will be located between the mouth of the canyon and the Kern River oil fields, and the power will be used to operate pumping plants on the arid plains of Kern County. The capitalists back of the project, with whom are associated John McWilliams and Henry J. Martens, have purchased about 8,000 acres of land lying along the two banks of the river and including the river bed, which will give the new owners control of the river, with necessary right-of-way for a canal from a short distance below the Power, Transit & Light Co.'s power plant nearly to the north end of the oil fields. Work will be begun on this enterprise next fall.

OGDEN, UTAH.—L. B. Spencer, Engr., Ogden, is preparing plans for the construction of a power plant to cost $150,000.

WALLACE, IDAHO.—The Slate Creek Electric Light & Power Co. has been granted a franchise to operate its system in Wallace. The company is constructing a hydro-electric plant on Slate Creek, which is to cost $200,000. H. J. Rogers is Vice-Pres.

LONDON, ONT.—E. I. Sifton, City Electrical Engr., has submitted a report to the Special Power Committee in regard to the city establishing a municipal electric light plant. He advises the city to construct and equip its own plant rather than to purchase the plant of the London Electric Co. He estimates the cost of a distributing station at $235,000. The London Electric Co. offers to sell its plant to the city for $506,000. The Council has decided to engage a consulting engineer to make further investigations in regard to the matter. If it is decided to install a municipal plant, electric-

ity will be purchased from the Hydro-Electric Power Commission. The plans call for the distribution of 5,000 HP.

CALGARY, ALTA.—The Calgary Power & Transmission Co. will immediately proceed with their power development scheme at Horseshoe Falls at an expenditure of over $1,000,000.

SWIFT CURRENT, SASK.—F. Laidley, of this town, has been granted a 10-year franchise for an electric light and power plant.

KAMLOOPS, B. C.—Arrangements are being made for improvements to the municipal electric light and pumping plant at a cost of about $40,000. H. K. Dutcher, Flack Bldg., Vancouver, B. C., is Consult. Engr. Noted on Feb. 25.

DAWSON CITY, Y. T.—The Dawson City Electric Light & Power Co.'s plant will be moved to Sourdough Coal Mine, 40 miles southwest, and will be enlarged to supply the mining camps and towns within a radius of 100 miles.

PARRAL, MEXICO.—Plans are being considered by the Mexican Northern Electric Co. for the construction of an electric power plant on the Rio Conchas River, a short distance from Parral, at a cost of about $5,000,000. The initial equipment of the plant will provide for an output of 15,000 HP., which will be used for mining and irrigation purposes. The company may extend the transmission line as far as Chihuahua. G. F. Greenwood, of Montreal, Que., is Pres.

BRIDGES.

(denotes that this work is advertised in Engineering News.)*

NEWBURYPORT, MASS.—According to the "Gloucester Times" the Essex County Commissioners have filed with the State Harbor and Land Commission plans for the new bridge to replace the "chain bridge" at Newburyport. The act under which the Commission is working provides that the new structure shall follow the lines of the old bridge. The Commission has filed a detail plan, showing every feature of the present bridge and a second plan showing the new bridge in not quite so full detail. The cables of the new bridge will follow the old suspension chains, being given the same sweep from the top of one pier to the other. The piers themselves will be different. Instead of presenting the wedge shape appearance from the ground up that they have now, they will have more the appearance of a trolley pole. They are to be single steel structures on each side of each end of the bridge, practically in the same location as the present structure with their arched driveways and cross bay work above. New anchorages are to be provided on each shore for the new cables. These will be independent concrete reinforced structures one on each side of the driveway. On both shores, the whole area between these anchorages and the foundation of the piers will be filled in solid with concrete.

PROVIDENCE, R. I.—A new highway bridge is to be built this year over the West River at Branch Ave., near the Wanshuck Mills. Estimated cost, $8,000.

HARTFORD, CONN.—George E. Hoadley, Hartford, has offered $25,000 to the city for the purpose of constructing a brownstone bridge across Park River at Mulberry St. The bridge will be 10 ft. wide and there will be three abutments.

NEW YORK, N. Y.—The Interstate Bridge Commission, appointed by the Governors of New York and New Jersey to make inquiry as to the best location for the proposed Hudson River suspension bridge between the New Jersey shore and the Borough of Manhattan, has sent a preliminary report to the legislatures of both states. The report contains the investigations of the various sites proposed for the bridge, although no recommendation is made for any one location, as no recommendation can be made until borings have been taken on each side of the Hudson River at the several locations which have been proposed. The formation of the substrata on which the foundations of such a bridge would have to be placed is a great factor, and the report points out the fact that if the rock bottom were shelving it would make the cost of the bridge far greater than were the natural foundation of flat rock formation. The New York branch of the Commission is asking the legislature for an appropriation of $25,000 to defray the expenses of making borings to determine the quality of rock formations along the Manhattan shore, and the New Jersey branch is asking the New Jersey Legislature for a similar appropriation for the New Jersey shore borings. No definite plans have been made, but it is argued by the Commissioners that a large item of expense in the construction of the bridge could be saved in the event of permission being obtained from the Government to construct a pier in the middle of the Hudson River in order to lessen the strain on the bridge cables and allow a far lighter cable construction than would be necessary should the bridge have to be of one span. Up to this time the War Department has refused to consider the river pier suggestion, declaring it to be an obstruction to navigation.

SLINGERLANDS, N. Y.—Bids, including plans, will be received until April 14 by the Town Board of Bethlehem, Albany County, at Slingerlands, for constructing a bridge across Normanskill Creek, on the new Scotland Plank Road, to replace the present covered bridge in the town of Bethlehem, the bridge not to be less than 120-ft. span and 18-ft. concrete roadbed and capable of carrying not less than 15 tons; also concrete piers and wings. George J. Coughtry is Town Clk.

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FREEHOLD, N. J.—Bids will be received until March 27 by the Board of Chosen Freeholders at Freehold, George W. Patterson, Jr., Clk., for constructing two reinforced concrete bridges at Halls Mills, Township of Freehold, on the road from Freehold to Adelphia; also same time and place for rebuilding the drawbridge at Belford, Middletown Township. John M. Braly is Engr., Villa Park.

CAMDEN, N. J.—Bids will be received until 11.30 a. m., April 3, by the Bridge Committee of the Counties of Camden and Burlington, at Camden, for constructing a reinforced-concrete arch-bridge over Pensauken Creek, on Roberts Road, between the Counties of Camden and Burlington. John J. Albertson is Engr. Camden County.

Bids will be received until April 12 by the Board of Chosen Freeholders at Camden, F. W. George, Clk., for constructing a concrete highway bridge over Cooper's Creek, between the townships of Clementon and Voorhees, near Osage Station; also a separate bid for rebuilding the bridge over Pines Run on Blackwood Turnpike, Gloucester Township. J. J. Albertson is County Engr., Camden.

CONOWINGO, MD.—The Conowingo Bridge Co. has awarded to the YORK BRIDGE CO., of York, Pa., the contract for constructing the bridge over the Susquehanna River at Conowingo, at $60,000.

BALTIMORE, MD.—J. Barry Mahool, Mayor, has approved the ordinance extending West Baltimore St., the work including the construction of the proposed bridge across Gwynn's Falls. Estimated cost, $100,000. B. T. Fendall is City Engr.

WEAVERVILLE, N. C.—The NASHVILLE BRIDGE CO., Nashville, Tenn., has been awarded contract for furnishing all iron bridges for line of Weaverville Electric Co. to Weaverville.

SAVANNAH, GA.—Bids are asked by Chatham County until May 3 for constructing a reinforced-concrete lock and bridge, Buckhalter Canal outlet. G. Reuben Butler is Clk.

STARKE, FLA.—Bids are asked until April 5 by C. L. Peek, Chn. County Comrs., for constructing steel bridge over New River, four miles from Lake Butler, structure to be 1,226 ft. long.

ISOLA, MISS.—Bids are asked until noon, April 5, by W. W. Miller, Clk. County Supervisors, for constructing a steel bridge over Jackson Bayou at Isola.

COURTLAND, MISS.—Panola County will construct an iron bridge over Long Creek, about one mile south of Courtland. The Board of Supervisors, Batesville, will soon receive bids. R. W. Draper is Clk.

YOUNGSTOWN, OHIO.—Bids will probably be asked in April for the construction of the Spring Common bridge in connection with the elimination of grade crossings. Estimated cost, $176,000. F. M. Lillie is City Engr.

YOUNGSTOWN, OHIO.—Bids are asked until 11 a. m., April 12, by the County Commissioners for masonry arch-bridge over Bears Den, Youngstown Township. Will B. Toms is County Audr.

DAYTON, OHIO.—Bids will be received until April 8 by the Board of County Commissioners for furnishing material and constructing the substructure and superstructure of a bridge over Wolf Creek on the Gettysburg Road, on the line between Madison and Harrison Townships.

MARIETTA, OHIO.—Bids are asked by the Commissioners of Washington County until noon, April 20, for constructing the substructures and superstructures of various bridges, abutments and other bridge work.

INDIANAPOLIS, IND.—The Board of Public Works is asking for bids for the construction of a bridge across the canal at 30th St. Estimated cost, $12,000. New bids will be received for the construction of a new bridge across Pleasant Run at Emerson Ave., the former bids having been rejected.

INDIANAPOLIS, IND.—Plans for the construction of a new bridge across the canal at 30th St. have been adopted by the Board of Public Works, and bids for its construction will be asked at once. The bridge will cost approximately $12,000, and is to be a reinforced-concrete structure, faced with stone, and about 70 ft. long.

PEORIA, ILL.—The Peoria & Pekin Union Ry. Co. proposes to construct a bridge across the Illinois River. Estimated cost, $600,000. W. E. Emery is Ch. Engr.

ST. JOSEPH, ILL.—Bids are asked until 2 p. m., March 27, by Chas. W. Dale, Town Clk., for the removal of two steel bridges and the replacing of the same. One bridge is about 70-ft. span and one about 100-ft. span, located on the Saline drainage branch.

MARSEILLES, ILL.—Bids are asked until 8 p. m., April 5, by Daniel T. Hines, City Clk., for the construction of each of two reinforced-concrete bridges across Gum Creek—one 27-ft. span on Union St. and one 28-ft. span on La Salle St., including abutments and wing-walls for each.

SUPERIOR, WIS.—The Northwestern Fuel Co. has let a contract for the construction of a 450-ft. loading and unloading bridge at its dock No. 2 in this city to the MYEL-PETTERSON CO., of Pittsburg.

SOUTH KAUKAUNA, WIS.—The Wisconsin Bridge & Iron Co., Milwaukee, Wis., has prepared plans for a 128-ft. steel bridge across the right of way of the Green Bay & Mississippi Canal Co. here.

LA MOURE, N. DAK.—Bids are asked until 2 p. m., April 6, by E. W. Field, County Audr., for building such wood and steel bridges as may be ordered during the year 1909, and also for furnishing corrugated, galvanized metal culverts as may be needed ordered during the year 1909, in the following sizes: 12, 13, 18, 24, 30, 36, 42, 48, 60 and 72-in. in diameter.

BROWNSVILLE, TEX.—The St. Louis, Brownsville & Mexico R. R. Co., R. C. Burgess, Resident Engr., Knoxville, Tenn., and National Lines of Mexico, A. Clark, Gen. Mgr., Mexico City, Mex., has awarded contract for substructure of international bridge across the Rio Grande River here to the FOUNDATION CO., 115 Broadway, New York, and for superstructure to WISCONSIN BRIDGE & IRON CO., North Milwaukee, Wis. The bridge will be about 500 ft. long.

ROTAN, TEX.—AUSTIN BROS., Dallas Tex., have been awarded contract to erect a 400-ft. highway bridge across Salt Prong of Brazos River, near Rotan.

McALESTER, OKLA.—Bids are asked until 5 p. m., April 10, by the County Clerk for constructing various bridges in the county.

ROCKY FORD, COLO.—Mark Denson, County Surv., is preparing plans for a bridge about seven miles south of Rocky Ford.

COLFAX, WASH.—Bids will be received until April 5 by the Board of County Commissioners, for constructing a steel bridge, 114 ft. long, across Pine Creek, near Malden. William M. Duncan is County Audr.

OAKLAND, CAL.—Bids will be received by the Clerk of the Board of Supervisors of Alameda County, until 10 a. m., March 29, for the construction and erection of a combination steel and wooden span bridge over the Tassajara Canal on the Chanot Road, or County Road No. 2961 in Pleasanton Road District. John P. Cook is Clk.

TORONTO, ONT.—The County of York has awarded contract for a 200-ft. single span bridge superstructure over the Humber River, north of Lambton Mills, to the ONTARIO BRIDGE CO., of Toronto, at $9,404.

EDMONTON, ALTA.—The City Council and the Canadian Pacific Railway Co. have plans for the joint railroad and traffic bridge to be erected here at a cost of approximately $300,000.

BUILDINGS.

(denotes that this work is advertised in Engineering News.)*

BAR HARBOR, ME.—James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., has awarded contract for the construction of a post-office at Bar Harbor, Me., to W. H. FISSELL & CO., St. James Bldg., New York, at $63,460. Time, March 1, 1910. A complete list of bids was given on Feb. 25.

*BARRE, VT.—Bids are asked until 3 p. m., April 26, by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the construction (including plumbing, gas piping, heating apparatus, electric conduits and wiring) of the U. S. post-office at Barre.

WILLIMANTIC, CONN.—Bids are asked by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., until 3 p. m., April 22, for the construction (including plumbing, gas piping, heating apparatus, electric wiring and conduits) of the U. S. post-office at Willimantic.

NEW BRITAIN, CONN.—The Siebert Co. is having plans prepared for a 6-tenement block, including an elevator. This building will cost about $60,000.

ALDEN, N. Y.—The Alden Park Hotel & Bath Co. will build a 3-story and basement brick hotel, 108 x 110 ft. Plans will be ready for bids in about three weeks. The building will be equipped with baths and toilets, steam heat, passenger elevator, gas engine and dynamo, steel fire escapes, etc.

BUFFALO, N. Y.—The City Architect is about to start drawing plans for a 16-room addition to Public School No. 1, on Seventh St. near Maryland St., and for a 10-room addition to School No. 49 on Glenwood Ave. The cost of these two additions will be about $80,000 and $85,000, respectively. The new buildings will adjoin the present structures, and will be fireproof, built of brick and steel, with fireproof floors.

SYRACUSE, N. Y.—A company has been organized for the purpose of erecting 100-family apartment house in Syracuse, which will be called the Leavenworth. The building will cost $350,000, and will be equipped with three elevators, restaurant and barber shop. It will be in six sections, and the first will be ready for occupancy on Sept. 1. Henry W. Roberts, of Utica, N. Y., is interested.

BUFFALO, N. Y.—Norris Morey, 807 D. S. Morgan Bldg., will erect a 3-story and basement 6-family apartment house, 64 x 96 ft., on Oakland Pl., of brick and stone. Cost, $40,000. H. Osgood Holland, Arch., 417 Mutual Life Bldg., has completed plans.

NEW YORK, N. Y.—We are officially advised that D. H. Burnham & Co., Archs., Railway Exchange Bldg., have filed plans with the Buildings Superintendent for the 12-story fireproof department store, with three basements, to be erected for Gimbel Bros. on the Hudson Tunnel Companies' holding on the west side of Broadway, from 32d to 33d Sts., now occupied by the Manhattan Theatre and Trainor's Hotel. The building is to be of brick, finished with trimmings of limestone and granite, and will front 197.5 ft. on Broadway and 400 ft. on both streets, and will be of a modern architectural type, with piers at the first and second stories inclosing the entrance and windows. There will be 41 passenger elevators, arranged in four groups, and six freight elevators. The building is to cost $4,000,000, according to the estimate of the architects. It is to be occupied under a lease with renewals for 105 years. The contract has been let to the THOMPSON-STARRETT CO., 49 Wall St. This store will contain 27¼ acres of floor space. It is expected that the store will be opened for business in the autumn of 1910. Work will be started at once. The store will be the terminal of the McAdoo tunnel system, which, by the time the building is completed, will connect with the Pennsylvania R. R., Central Railroad of New Jersey, the Erie system and the Lackawanna & Western R. R. None of the tunnel tracks will be under the store, but all trains will disembark their passengers through the store, stations being planned for two floors. The brothers actively managing the business are Jacob Gimbel, Isaac Gimbel, Ellis A. Gimbel, Daniel Gimbel, Charles Gimbel and Louis S. Gimbel, all of Philadelphia.

NEW YORK, N. Y.—The proposed Rector Hotel, which is to be built at the corner of Broadway and 44th St., will be 14 stories high, instead of twelve, as originally planned. It will have a frontage of 100 ft. on Broadway and 180 ft. on 44th St. It will be built from plans by John Russell Pope, Arch., 1133 Broadway.

Plans have been filed for a 10-story fireproof elevator apartment house, to contain 41 suites of apartments and to be built by Paterno Bros., Inc., from designs by Schwartz & Gross, Archs., 347 Fifth Ave. The building will be erected at Claremont Ave. and north of 116th St., at a cost of $325,000. It is to have a frontage of 84 ft. on the avenue and a depth of 83 ft.

A 10-story loft and store building is to be erected for the estate of Walden Pell, at 24 and 26 West 30th St. It is to be of limestone trimmed with terra cotta, and will have tiers of mezzanine windows bordered by tall pilasters at the sides of the façade. It is to cost $80,000, according to the estimate of Pell & Corbett, Archs., 31 Union Sq.

Plans for a 6-story apartment house, with 36 suites, to be built for the Lansing Co., at the corner of Riverside Drive and 156th St., have been filed. The structure will be built at a cost of $200,000. Also plans have been filed for a 6-story apartment house, with 37 suites, for the Fort Washington Syndicate, at the southeast corner of Haven Ave. and 181st St., to cost $125,000. G. F. Pelham, 503 Fifth Ave., is Arch. for both operations.

NEW YORK, N. Y.—An apartment house is to be erected on a plot about 75 x 100 ft. at the corner of 38th St. and Madison Ave., by George F. Johnson, Jr., and Frederick Johnson.

Plans have been filed for a 7-story loft building for the Napoleon Construction Co. on 28th St., 350 ft. east of Sixth Ave., from designs by Thomas W. Lamb, Arch., 244 Fifth Ave. It is to cost $60,000.

St. Luke's Hospital on Morningside Heights is to be enlarged by a 9-story addition, to be known as the Travers Pavilion. This addition will form a new wing at the east end of the hospital quadrangle adjoining the administration building. It is to be fireproof, and will be built of brick, with marble trimmings. The addition will harmonize in appearance with the existing group of hospital buildings. It will be 75.9½ ft. front, with a similar depth, and will have a large central covered court. The main story will contain a series of surgical operating and examination rooms and a sterilizing room. The second floor will have more examination rooms, an electrical room and a laboratory, and there will be a solarium on the eighth story and a roof garden on the top story. The building will cost $200,000. Ernest Flagg, 35 Wall St., is Arch.

NEW YORK, N. Y.—Bids are asked until 3 p. m., April 5, by John W. Brannan, Pres. Bd. of Trustees, Bellevue and Allied Hospitals, for labor and materials required for all the excavation, top soil, sodding, seeding, concrete work, stone work, brick work, iron work, plumbing, carpenter and other work in the layout of the grounds, paths, fences and inclosing walls and gateways at the new training school for women nurses, Bellevue Hospital, foot of East 26th and 25th Sts, the City of New York.

INDUSTRY, N. Y.—DEAN & HAVENS, of Olean, N. Y., have been awarded the contract for construction of four cottages for boys and for erection of Industry building at the State Agricultural College at Industry, N. Y., for $47,790. F. B. Ware is State Arch., the Capitol, Albany.

GOWANDA, N. Y.—See item under Manufacturing Plants.

LAKEWOOD, N. J.—We are advised by Dr. A. Trego Shertzer, 25 West Preston St., Baltimore, Md., that he and George E. E. Timanus and William A. Blossom, of Baltimore, Md., have obtained letters of incorporation at Lakewood for the construction of a sanitarium, 100 x 150 ft., at Lakewood Terrace, to cost $125,000. The building will be of brick or stone, four stories high, and surrounded by more than five acres of ground. The tract is located 1½ miles from Lakewood and nine miles from the ocean. The building will contain 100 bedrooms and an electric light plant. A center building with two wings will be erected of brick, stone or concrete. The architect has not been selected. T. B. Shertzer, C. E., has prepared plans for the sewerage, water supply, etc. Dr. A. Trego Shertzer is Pres. of the Lakewood Terrace Hotel & Sanitarium Co. The shareholders will hold a regular meeting at Lakewood Terrace, on May 29, and invite all contractors, etc., to meet there at that time. Contracts for the different departments of the hotel and sanitarium, including electric plant, sewerage and water supply, will be let then.

PHOENIXVILLE, PA.—We are officially advised that J. V. Poley, Arch., 162 Second Ave., Royersford, Pa., is preparing plans and will receive bids about April 1 for a 2-story fire engine house, 36 x 62 ft., for the West End Fire Co., No. 3. The building will be constructed of brick and stone and will have composition roof and steam heat.

PITTSBURG, PA.—Several old buildings at 905-7 Fifth Ave., next to the corner of Federal St., are to be torn down soon to make way for a $75,000 mercantile building. Plans being drawn call for a 6-story fireproof structure, with terra cotta front, to cover 48 x 116 ft. The building will be built by Goorin, Shapira & Co., wholesale hatters, who intend occupying half of it, as it is to be built with two storerooms, and an elevator in each. Goorin, Shapira & Co. are now located at 632 Fifth Ave., where they will remain until their new building is completed. Work on it will be started soon after April 1, and it is thought can be finished by January of next year.

BALTIMORE, MD.—Plans for the proposed building to be erected by the Fidelity & Deposit Co. of Maryland at Charles and Lexington Sts., have been completed by

Baldwin & Pennington, Archs., Professional Bldg., and work on the structure will begin in the early spring. There will be either 12 or 14 stories. In addition to the building the company occupies, ground on each side will be taken up by the new structure. The two stores next to it on Charles St. and the one next on Lexington St. will be torn down. This work is expected to begin in a few weeks. The building will be constructed of the same kind of granite as the present structure. Brick will be used in the back walls, but the frame will be of steel construction, making it fireproof. Six elevators will be installed.

ANNAPOLIS, MD.—Bids were received as follows on March 20 at the Bureau of Yards and Docks, Navy Dept., Washington, D. C., for the construction of one general ward of one story and basement, two 1-story and basement isolation double ward buildings and all connecting corridors. The buildings are to be of brick, on foundations and footings of concrete. The connecting corridors are to be of brick and concrete below the first floor and wooden above the first floor. The floors of the buildings and corridors are to be of reinforced-concrete construction. Bids are asked (a) for work complete, (b) for work complete omitting southeast isolation ward building, Wards E and F, (c) for work complete omitting Ward E of the southeast building: James J. Stehle, Annapolis, Md., (a) $129,577, (b) $87,572, (c) $106,341; Baltimore Ferro-Concrete Co., 16 St. Paul St., Baltimore, Md., (a) $95,385, (b) $61,280, (c) $80,090; C. M. Leach, care of Navy Yard, Boston, Mass., (conditional), (a) $125,873, (b) $73,873, (c) $99,873; Henry E. Baton, 1221 Arch St., Philadelphia, (a) $106,500, (b) $66,000, (c) $88,000; David M. Andrew Co., Mt. Vernon Ave. and 26th St., Baltimore, (a) $88,332, (b) $57,332, (c) $73,850; Noel Construction Co., Fidelity & Guarantee Bldg., Baltimore, (a) $81,000, (b) $55,000, (c) $71,000; Benjamin F. Bennett Building Co., 123 South Howard St., Baltimore, Md., (a) $87,900, (b) $55,455, (c) $72,444.

WASHINGTON, D. C.—The Sundry Civil Act, as signed by the President, makes appropriations as follows for work at various public buildings:

Aiken, S. C., $35,000; Albequerque, N. Mex., $30,000; Alexandria, Minn., $20,000; Alliance, Ohio, $30,000; Alton, Ill., $20,000; Americus, Ga., $25,000; Ames, Iowa, $35,000; Amsterdam, N. Y., $25,000; Anderson, S. C., $20,000; Appleton, Wis., $40,000; Asbury Park, N. J., $40,000; Ashtabula, Ohio, $35,000; Athens, Ga., $23,000; Athens, Ohio, $20,000; Atlanta, Ga., $550,000; Auburn, Me., $20,000; Austin, Minn., $35,000.

Baltimore, Md., post-office and court-house, completion of enlargement, $35,000; Baltimore, Md., post-office, $5,000; Bar Harbor, Me., $10,000; Barre, Vt., $13,500; Bath, Me., $15,000; Beatrice, Neb., $30,000; Beaumont, Tex., $800; Bedford, Ind., $15,000; Belfast, Me., $17,000; Belville, Ill., $20,000; Bellingham, Wash., $30,000; Beloit, Wis., $55,000; Belvedere, Ill., $8,000; Beverly, Mass., $40,000; Bismarck, N. Dak., $30,000; Bluefield, W. Va., $50,000; Boise, Idaho, $85,000; Boulder, Colo., $10,000; Bowling Green, Ky., $60,000; Bradford, Pa., $35,000; Brainerd, Minn., $35,000; Brattleboro, Vt., $50,000; Brazil, Ind., $45,000; Bridgeton, N. J., $10,000; Bristol, Tenn., $20,000.

Calais, Me., $10,000; Canadaigua, N. Y., $25,000; Cape Girardeau, Mo., $65,000; Carbondale, Pa., $25,000; Carlisle, Pa., $35,000; Carrollton, Mo., $45,000; Carthage, Mo., $40,000; Catlettsboro, Ky., $45,000; Cedar Rapids, Iowa, $10,000; Centralia, Ill., $40,000; Chambersburg, Pa., $30,000; Charleston, W. Va., $50,000; Chelsea, Mass., $45,000; Chester, Pa., $20,000, Chicago Heights, Ill., $35,000; Chippewa Falls, Wis., $15,000; Cleburn, Tex., $50,000; Cleveland, Ohio, $1,025,000; Cleveland, Tenn., $35,000; Clifton Forge, Va., $20,000; Clinton, Mo., $45,000; Coldwater, Mich., $10,000; Colorado Springs, Colo., $65,000; Columbus, Ind., $45,000; Columbus, Miss., $20,000; Columbus, Neb., $45,000; Columbus, Ohio, $300,000; Concord, N. C., $40,000; Connellsville, Pa., $20,000; Connersville, Ind., $40,000; Corinth, Miss., $45,000; Corsicana, Tex., $30,000; Council Bluffs, Iowa, $40,000; Crookston, Minn., $20,000.

Dallas, Tex., $3,000; Dalton, Tex., $20,000; Danville, Ill., $100,000; Danville, Ky., $30,000; Danville, Va., $40,000; Davenport, Iowa, $45,000; Dayton, Ohio, $100,000; Decorah, Iowa, $45,000; Delaware, Ohio, $45,000; Demopolis, Ala., $25,000; Denison, Tex., $25,000; Denver, Colo., $200,000; Des Moines, Iowa, $225,000; Detroit, Mich., $125,000; Devils Lake, N. Dak., $75,000; Dixon, Ill., $25,000; Dothan, Ala., $35,000; Dover, N. H., $35,000.

East Liverpool, Ohio, $40,000; Easton, Pa., $20,000; East St. Louis, Ill., $125,000; Elgin, Ill., $20,000; Ellsworth, Me., $20,000; Elizabeth, N. J., $71,250; Elwood, Ind., $30,000; Emporia, Kan., $15,000; Enid, Okla., $55,000; Escanaba, Mich., $14,000; Estherville, Iowa, $45,000; Eugene, Ore., $20,000.

Fairbury, Neb., $55,000; Fairmont, W. Va., $20,000; Faribault, Minn., $30,000; Fayetteville, Ark., $10,000; Fayetteville, N. C., $30,000; Fernandina, Fla., $25,000; Fort Collins, Colo., $35,000; Fort Dodge, Iowa, $105,000; Frankfort, Ky., $40,000; Fredericksburg, Va., $20,000; Fremont, Neb., $35,000.

Gadsden, Ala., $35,000; Gainesville, Fla., $25,000; Gainesville, Ga., $15,000; Gonzales, Tex., $20,000; Grand Island, Neb., $45,000; Grand Rapids, Mich., $340,000; Green Bay, Wis., $35,000; Green Castle, Ind., $30,000; Greenburg, Pa., $30,000; Greenville, Ill., $40,000; Greenville, Miss., $15,000; Greenville, Tex., $20,000; Griffin, Ga., $30,000; Gulfport, Miss., $25,000.

Hamilton, Ohio, $40,000; Harriman, Tenn., $42,000; Hattiesburg, Miss., $40,000; Hazleton, Pa., $20,000; Henderson, N. C., $40,000; High Point, N. C., $45,000; Hillsdale, Mich., $35,000; Hinton, W. Va., $35,000; Hoboken, N. J., $40,000; Holdrege, Neb., $50,000; Honolulu, H. T., $150,000; Hope, Ark., $37,500; Hot Springs, Ark., $30,000; Houston, Tex., $200,000; Hudson, N. Y., $20,000.

Independence, Kan., $6,000; Independence, Mo., $50,000; Iona, Mich., $45,000; Ironton, Ohio, $50,000.

Jackson, Mich., $10,000; Jackson, Miss., $10,000; Jackson, Tenn., $30,000; Jeffersonville, Ind., $50,000; Jersey City, N. J., $150,000; Johnson City, Tenn., $20,000; Jonesboro, Ark., $45,000.

Kearney, Neb., $20,000; Keen, N. H., $35,000; Kenosha, Wis., $15,000; Kewanee, Ill., $35,000; Kingston, N. C., $40,000; Knoxville, Tenn., $20,000; Kokomo, Ind., $40,000.

La Crosse, Wis., $20,000; La Grand, Ore., $45,000; Lake Charles, La., $15,000; Lancaster, Ohio, $25,000; Lander, Ky., $50,000; Lead, S. Dak., $20,000; Lebanon, Ky., $25,000; Lewiston, Iowa, $45,000; Lexington, Ky., $55,000; Lexington, Mo., $30,000; Lima, Ohio, $40,000; Lincoln, Ill., $35,000; Litchfield, Ill., $40,000; Little Rock, Ark., $25,000; Logan, Utah, $20,000; London, Ky., $10,000; Los Angeles, Cal., $137,000; Lynchburg, Va., $60,000.

Macon, Mo., $45,000; Malone, N. Y., $35,000; Manchester, N. H., $10,000; Manchester, Va., $5,000; Manhattan, Kan., $20,000; Manistee, Mich., $20,000; Manitowoc, Wis., $20,000; Marietta, Ga., $10,000; Marietta, Ohio, $40,000; Marinette, Wis., $15,000; Marion, Ind., $20,000; Marion, Ohio, $20,000; Marlboro, Mass., $40,000; Mason City, Iowa, $5,000; Massillon, Ohio, $55,000; Mayfield, Ky., $15,000; McKinney, Tex., $40,000; Meadeville, Pa., $45,000; Meriden, Conn., $20,000; Meridian, Miss., $30,000; Michigan City, Ind., $15,000; Middletown, N. Y., $35,000; Milford, Del., $10,000; Milford, Mass., $55,000; Minneapolis, Minn., $150,000; Missoula, Mont., $30,000; Mitchell, S. Dak., $35,000; Moline, Ill., $20,000; Monroe, Mich., $45,000; Montgomery, Ala., $10,000; Moscow, Idaho, $15,000; Mount Clemens, Mich., $50,000; Mount Sterling, Ky., $54,000; Murfreesboro, Tenn., $15,000; Murphysboro, Ill., $45,000; Muskogee, Okla., $25,000.

Nevada, Mo., $25,000; Newark, Ohio, $15,000; New Berlin, Conn., $30,000; New Brunswick, N. J., $25,000; New London, Conn., $30,000; Newnan, Ga., $25,000; New Orleans, La., $800; New Ulm, Minn., $20,000; New York, N. Y., post-office, $1,500,000; New York barge office, $100,000; Niles, Mich., $20,000; Norfolk, Va., $1,200; North Platte, Neb., $60,000; North Yakima, Wash., $50,000.

Ocala, Fla., $25,000; Ogden, Utah, $40,000; Oklahoma City, Okla., $70,000; Olean, N. Y., $25,000; Ottumwa, Iowa, $25,000; Owosso, Mich., $5,000.

Palestine, Tex., $50,000; Pana, Ill., $54,000; Paris, Ill., $40,000; Paris, Ky., $15,000; Parsons, Kan., $50,000; Pawtucket, R. I., $30,000; Peoria, Ill., $52,000; Perry, Okla., $3,000; Peru, Ind., $40,000; Petersburg, Va., $20,000; Pine Bluff, Ark., $15,000; Pittsburg, Kan., $35,000; Platteville, Wis., $22,000; Plattsburg, Neb., $35,000; Pontiac, Mich., $40,000; Portsmouth, Va., $20,000.

Quincy, Ill., $50,000.

Rawlins, Ky., $20,000; Reading, Pa., $20,000; Red Wing, Minn., $12,500; Richford, Vt., $45,000; Richmond, Va., $20,000; Rochester, Minn., $35,000; Rock Island, Ill., $55,000; Rock Springs, Wyo., $60,000; Rome, Ga., $20,000; Ruston, La., $20,000.

Sacramento, Cal., $45,000; St. Louis, Mo., $500,000; Salisbury, N. C., $20,000; San Angelo, Tex., $33,000; San Antonio, Tex., $75,000; San Francisco, Cal., mint building, $15,000; San Juan, P. R., $50,000; San Marcos, Tex., $40,000; Santa Barbara, Cal., $50,000; Santa Cruz, Cal., $40,000; Santa Rosa, Cal., $20,000; Sault Ste Marie, Mich., $30,000; Selma, Ala., $20,000; Sewickley, Pa., $40,000; Shamokin, Pa., $40,000; Sharon, Pa., $20,000; Shenandoah, Iowa, $35,000; Sheridan, Wyo., $50,000; Shreveport, La., $75,000; Sioux Falls, S. Dak., $80,000; Spokane, Wash., $75,000; Springfield, Mass., $35,000; Springfield, Ohio., $35,000; Stevens Point, Wis., $45,000; Sulphur Springs, Tex., $37,000; Sumter, S. C., $20,000.

Temple, Tex., $50,000; Terrell, Tex., $35,000; Toledo, Ohio, $150,000; Trenton, N. J., $40,000; Trinidad, Colo., $15,000; Troy, Ala., $20,000; Tuscaloosa, Ala., $40,000.

Versailles, Ky., $25,000; Valdosta, Ga., $25,000; Virginia, Minn., $40,000.

Walla Walla, Wash., $40,000; Warrensburg, Mo., $45,000; Watertown, N. Y., $40,000; Watertown, S. Dak., $25,000; Watertown, Wis., $45,000; Waycross, Ga., $50,000; Webster, Mass., $45,000; Wellington, Kan., $50,000; Wichita Falls, Tex., $30,000; Willimantic, Conn., $25,000; Wilmar, Minn., $33,000; Wilmington, Del., $80,000; Wilmington, N. Dak., $100,000; Winchester, Va., $20,000; Woburn, Mass., $45,000.

Yazoo, Miss., $20,000; York, Neb., $15,000; York, Pa., $50,000; Youngstown, Ohio, $3,000.

Washington, D. C., Bureau of Engraving, $500,000.

NORFOLK, VA.—Bids were received as follows on March 16, at the Bureau of Supplies and Accounts, Navy Dept., Washington, D. C., for the construction of two additional wards for the Naval Hospital, Norfolk, Va.: W. Bateson & George Hess, Jr., Wheeling, W. Va., $89,012; B. F. Bennett Bldg. Co., Baltimore, $99,500; C. H. East & E. B. Hibbs, Norfolk, Va., $91,721; George A. Fuller Co., Washington, $88,000; Charles Langley, Washington, $90,450; William Lipscomb & Edwin W. Davis, Washington, $94,692; Joseph E. Pennock, Philadelphia, $85,484; R. H. & R. R. Richardson, Hampton, Va., $93,434 Thompson-Starrett Co., New York, $96,803; J. H. Brinson, Hampton, Va., $92,770.

*FORT MORGAN, ALA.—Bids are asked until 1.30 p. m., April 20, by Capt. H. B. Chamberlin, Q. M., U. S. A., Fort Morgan, for the construction, plumbing, heating and electric wiring at Fort Morgan, of one barrack, one Field Officers' quarters, four single sets of Company Officers' quarters, one mess hall, one lavatory, one double set Firemen's quarters, one wagon shed, alteration and addition to of porches on Buildings 3-24-34 and 35, and for moving Administration building and two sets N. C. O. quarters.

RICHMOND, KY.—James Knox Taylor, Superv. Arch., Treasury Dept., Washington, has awarded contract for the construction of an hydraulic elevator plant in the post-office building at Richmond, Ky., to the OTIS ELEVATOR CO., 17 Battery Pl., New York, at $9,484.

TOLEDO, OHIO.—A 6-story concrete building, to cost $200,000, will be erected for J. L. Hudson Co., at Summit and Adams St., by Mrs. Mary E. Nearing, owner of the property. The exterior walls will be of brick. George S. Mills, Arch., Ohio Bldg., Toledo, has prepared the plans. It is stated that more than three-quarters of the building will of glass. The total floor space will be 118,080 ft.

CLEVELAND, OHIO.—A main office building for the Peerless Automobile Co. is to be built this spring, completing the company's group of buildings on Quincy Ave. The main office building will be four stories high with a frontage of 57 ft. and a depth of 129 ft. There will be two wings also. On the main floor will be offices as well as salesrooms and a waiting room. On the top story of the central building will be drafting rooms. The building will be finished throughout with marble hallways and ornamental stairways. Bids for the erection of the building will be asked soon. J. Milton Dyer is Arch., Cuyahoga Bldg., Cleveland.

ELKHART, IND.—Plans have been approved and bids will be received by the Trustees of the St. Vincent School for the construction of an academy.

TIPTON, IND.—J. S. Sherman, of Sullivan, Ind., is preparing to build a $50,000 flat building in this city. Bids will be in order when plans are completed.

LA FAYETTE, IND.—The Trustese of Purdue University have ordered plans and will ask for bids as soon as possible for construction of two buildings for the School of Agriculture. Estimated cost, $50,000 each. Also for the construction of a building for the Engineering Department. Estimated cost, $170,000.

TERRE HAUTE, IND.—The Directors of the German Club are preparing to ask for bids for the construction of a club house to cost $50,000.

ANDERSON, IND.—The School Board has issued $125,000 in bonds and will ask for bids soon for the construction of a school building to cost $100,000, and also for the construction of an addition to the Second Ward building.

BLOOMINGTON, IND.—The Trustees of each of the following church congregations are planning to ask for bids for the erection of church buildings: The Holy Trinity Church, Kirkwood Ave. and Grant St., $25,000; Morton St. Christ Church, $30,000, and the Eighth St. M. E. Church, $40,000.

INDIANAPOLIS, IND.—Work will be begun at once on a building to be erected by Arthur Jordan on North Pennsylvania St., between New York and Vermont Sts., to be occupied by the Studebaker Bros. Mfg. Co., of South Bend, Ind. The building will be four stories in height, of brick and stone, with white terra-cotta and plate glass front. It will have a front of 92½ ft. in Pennsylvania St., with a depth of 195 ft., and will cost $100,000. The site is now occupied by the old John S. Spann home and is immediately north of the lot occupied by the Star building. Frank Staley is interested.

INDIANAPOLIS, IND.—The BECKERICH BROS. have secured a contract for the erection of a large business building corner College Ave. and 22d St. Brick, with stone trimmings, will be used.

Plans have been ordered for the erection of a Presbyterian Church in Meridian Heights. Bids will be received by B. W. Heaton, Chn. Bd. of Trustees. Charles H. Byfield is Arch.

Arthur Gordon has ordered plans for the construction of a 3-story brick and stone business building to be erected on Pennsylvania St. The building will be 92½ × 195 ft. and is estimated to cost $100,000.

J. M. Tindall and J. R. Messiek have ordered plans and will ask for bids soon for the construction of four apartment houses on Fall Creek Boulevard. Estimated aggregate cost, $50,000. W. A. Stables is Arch., Baldwin Block.

Indianapolis Lodge No. 17, Royal Order of Moose, is planning to build a 4-story business and lodge hall building. Estimated cost, $125,000. Bids will be invited after plans are completed. J. F. McClure is Chn.

The Board of Directors of the Zion Evangelical Church, 32 West Ohio St., is planning to ask for bids for the erection of an Old Ladies' Home to cost $100,000.

INDIANAPOLIS, IND.—D. A. Bohlen & Sons, Archs., Majestic Bldg., are preparing plans for the construction of a business house for J. M. Kitchen on Pennsylvania St. Estimated cost, $75,000. The building will be four stories high and the entire outside will be constructed of cream enameled terra cotta, with trimmings of white. Bids for construction, for heating and plumbing and for wiring will be received separately.

MANISTEE, MICH.—Bids are asked until 3 p. m., April 21, by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the construction complete (including plumbing, gas piping, heating apparatus, electric conduits and wiring), of the U. S. post-office at Manistee.

DIXON, ILL.—Bids were received as follows on March 22 at the office of James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the construction of a post-office building at Dixon, Ill.: Lynn B. Milliken, Indianapolis, Ind., $72,809; Mark D. Smith, Dixon, Ill., $63,954; McHenry Beatty Co., East Liverpool, Ohio, $59,350; Bartlett & Kling, Inc., Cedar Rapids, Iowa, $67,800; Schurmann Lumber Co., Inc., Saginaw, Mich., $59,995; General Construction Co., Milwaukee, Wis., $61,640; Hazelton & Wallin, Chicago, $60,700; James M. Bishop, Crawfordsville, Ind., $71,984; Charles W. Gindele Co., Chicago, $57,000; Northern Construction Co., Milwaukee, $60,494; W. J. McAlpine, Dixon, Ill., $61,400; King Lumber Co., Charlottesville, Va., $62,000; Majestic Construction Co., Milwaukee, Wis., $65,989; North-Western Construction Co., Wahpeton, N. Dak., [illegible],497; Giacomo Maffioli, Rockford, Ill., [illegible],908; Gindele Bros. & Co., Chicago, $72[illegible]

MILWAUKEE, WIS.—[illegible] Bank Bldg., proposes to [illegible] a $260,000 apartment building at th[illegible] [illegible]ner of Ninth and State Sts., to accomm[illegible] 143 families. The building will be 200 × [illegible] ft. in ground dimensions and will be [illegible] stories high. Brick and terra cotta w[illegible] used in the construction. In the inter[illegible] be an open court. There will be 22 [illegible] ways in the structure. Iron balcony [illegible] escapes and stairways have been prov[illegible] the architects, Leiser & Holst, Berm[illegible] Bldg. A permit for the building has b[illegible] issued by E. V. Koch, Bldg. Inspector.

ST. PAUL, MINN.—Bid[illegible] being received by C. H. Johnston, [illegible], Manhattan Bldg., on the construct[illegible] a pressed brick and cut stone, 2-stor[illegible] [illegible]nasium for Hamline University, St. Pa[illegible] H. Bridgman is Pres.

ABERDEEN, S. DAK.—T[illegible] [illegible]rectors of the Citizens' Trust & Saving[illegible] have announced that the constructi[illegible] [illegible] begin at once of a fireproof bank an[illegible] building, six stories and a basement, [illegible] corner of Second Ave. and Main St., [illegible] over a lot 50 × 14 2ft. The building [illegible] of pressed brick and stone.

HELENA, MONT.—We ar[illegible] [illegible]ially advised that the State Legisla[illegible] has passed a bill providing for the enla[illegible] [illegible]nt of the present State Capitol by th[illegible] [illegible]ddition of two wings. The money for th[illegible] [illegible]ilding will be obtained from the Capitol [illegible] and grant, upon which bonds to the amou[illegible] of $500,000 will be issued. The plans, a[illegible] [illegible]pared by J. H. Kent, Arch., of Butte, M[illegible], provide for a wing at each end of th[illegible] [illegible]pitol, one to be occupied by the Senate a[illegible] the other by the House of Representati[illegible], together with halls, staircases, lobbi[illegible], galleries, committee rooms, toilet and cl[illegible]k rooms; each wing to be connected with the halls of the main building by means of wide, well-lighted corridors, 20 ft. long. The floor of the Senate chamber and house is to be level with the present main or executive floor of the building. The galleries to be level with the second or present legislative floor. Committee rooms will be on same floor and floor above.

ST. LOUIS, MO.—The vacant property on Washington Ave., east of Twelfth St., is to be improved with a commercial building to cost about $100,000. The building will be erected by the Augustus Knight estate, and will probably be a 7-story structure, in keeping with the other improvements on the street. It is to occupy a lot 75x150 ft. on the south side of Washington, between Eleventh and Twelfth Sts., and will be numbered 1122-24-26 Washington Ave. It will face on St. Charles St. also. The building will adjoin the 8-story structure of the Corinth Woolen Mills.

*TEXARKANA, TEX.—Bids are asked until 8 p. m., April 6, by H. R. Cartey, City Engr., for constructing a city jail.

DENVER, COLO.—A $60,000 1-story addition will be built on the Corona school, and it has been decided to begin work at once. The addition will be of reinforced concrete and steel and will be fireproof. It will face on Ninth and Downing Sts.

BREMERTON, WASH.—Bids are asked by R. C. Hollyday, Ch. of Bureau of Yards and Docks, Navy Dept., Washington, D. C., until 11 a. m., April 24, for constructing three buildings and their connecting passages for the Naval Hospital at the U. S. Navy Yard, Puget Sound, Washington. Specifications are on file at the office of Engineering News, New York.

PORTLAND, ORE.—The Portland Railway, Light & Power Co., it is stated, has decided to erect at once a 9-story office building over the sub-station at the corner of 17th and Alder Sts. The general offices will be moved into the new structure upon its completion and the First and Alder Sts. headquarters building will be rented. Work will start at once upon the building, and it is expected to have it completed ready for occupancy by Sept. 1. It is estimated that the cost will be $235,000. It is said that the contract is now being arranged with the Hurley-Mason Co. The present sub-station will be retained in the basement of the building. The first two floors will also be given over to the machinery that now occupies the sub-station, together with the storage battery and additional apparatus to be installed to feed the underground distributing system. The company will require three floors of the new building for its offices and the remaining four stories will be rented. The building will cover ground space 100 × 100 ft. A. H. Richmond, Portland, is Ch. Engr.

SAN DIEGO, CAL.—The Pacific Building Co., of San Diego, is completing plans for construction of an apartment house and store building on the southwest corner of Tenth and D Sts., for Louis J. Wilde, Pres. of the American National Bank in this city. The building will cost about $40,000. It will contain five storerooms for business purposes, in addition to a room for storage purposes for the tenants. The upper floors wil have 26 2-room apartments and eight 3-room apartments. All will be equipped with separate bath rooms, kitchen, telephones, beds, built-in furniture, etc. The building will be three stories and basement and have a roof garden. It will be of frame construction with cement plaster finish on metal lathing.

SIERRA MADRE, CAL.—A committee from the Sierra Madre Board of Trade is investigating a project for the construction of a hotel building in that section. The committee is composed of Charles S. Kersting, Pres. of the First National Bank of Sierra Madre; J. J. Graham, of the Sierra Madre Hardware Co.; J. W. Keys, Mgr. for the L. W. Blinn Lumber Co.; W. S. Andrews, Mayor Jones, A. S. Mead, M. H. Bridle, and W. H. Kendig, lessee of Hotel Sierra. A building to cost from $50,000 to $75,000 will be built, provided a sufficient number of subscribers can be induced to subscribe for the stock.

POMONA, C[illegible]—The contract for constructing the [illegible]oposed Pomona Christian Church has [illegible] let to WILTON BROS., their bid for [illegible] construction of the building being $[illegible]33, exclusive of the heating and ve[illegible]ing plant. Other bidders were Grant [illegible]ann, $42,854; J. W. Heckman, $47,64[illegible] J. Noble, $49,400, and J. L. Jacobs & [illegible] Co., $54,337. It will be of brick, 8[illegible] ft., and will be unique in many respe[illegible] It will have a blower system of heat[illegible] Robert H. Orr, of Pomona, is Arch.

SAN FRA[illegible]CO, CAL.—Newton J. Tharp, City Arch., [illegible] announced that the formal program for [illegible] competition of architects on the city ha[illegible]rk has been completed and that the lim[illegible] specified for construction is $4,000,000, [illegible] which $250,000 must be reserved for [illegible]ngencies. It is planned to invite ten a[illegible]itects to submit plans on a guarante[illegible] each shall be paid $1,000 whether h[illegible]lan is used or not, and in addition all [illegible]her architects in the United States may [illegible]mpete and the three of these whom the [illegible]y decide have the best plan shall receiv[illegible]2,500, $1,500 and $1,000, without regard [illegible] whose plan may be accepted and used. The competitors shall exercise their own judgment as to designing a building of five stories covering the space proposed, the requisite space in the new structure to be 6,000,000 cu. ft. Sixty cents a cu. ft. should cover all expenses of construction. This would total $3,600,000; then the $150,000 left aside from the $250,000 reserve is to go for statuary and approaches. Working plans must be ready within six months after making of award. The basement shall be of light California granite and the stories above of sandstone or limestone. The Board of Works have approved of the above, and have sent the matter to the Supervisors for final action.

The general working drawings for the Hall of Justice are being prepared. The drawings for the steel frame, foundation and excavation work are completed and bids will be called for as soon as the specific appropriation shall have become available. The working drawings for the County Jail building are estimated to be about 50% completed.

MONTREAL, QUE.—The Banque Nationale will erect during the present year an 8-story bank and office building bounded on the north by St. James St., on the south by Fortification Lane, and on the west by Place d'Armes Hill. The plans are now being prepared by Marchand & Haskell, 164 St. James St. The officers of the bank are: R. Audette, Pres.; Hon. Judge A. Chauveau, Vice-Pres.; V. Chateauvert, Naz. Fortier, J. B. Laliberte, Victor Lemieux and Charles Pettigrew, Dirs.; P. Lafrance, Gen. Mgr.

BRANDON, MAN.—The Canadian Northern depot to be erected here will cost $45,000. H. M. McLeod, Gen. Mgr., Winnipeg, Man.

MOOSE JAW, SASK.—Among the new buildings to be erected here this spring are the following: Collegiate Institute, $100,000; Y. M. C. A. building, $40,000; Anglican Church, $40,000; Fire Hall, $30,000. D. Milne is interested.

REGINA, SASK.—The Baptist Congregation has raised $48,000 for the erection of a new church here to seat 800 people. A. C. Hunt is interested.

VANCOUVER, B. C.—The British Columbia Electric Street Ry. Co. will call for bids soon for erection of an office and terminal building here to cost approximately $200,000. R. H. Sperling is Gen. Mgr.

VICTORIA, B. C.—Bids are asked by A. Maxwell Muir, Arch., 1208 Government St., until noon, March 27, for a 5-story newspaper office for Hon. W. Templeman. Stone, brick and reinforced concrete will be used in construction.

WATER SUPPLY—IRRIGATION.

(* *denotes that this work is advertised in Engineering News.*)

LYNN, MASS.—The city contemplates the installation of a high-pressure water service for fire protection. Estimated cost, $500,000.

MEDINA, N. Y.—The citizens on March 1 voted to expend not more than $3,000 annually for the next three years in addition to the $2,000 allowed by law for improving and extending the water system.

ANTRIM, N. Y.—The contract for constructing a large dam here for water-works purposes has been awarded to GEORGE H. CAUGHEY, Winter St., Waltham, Mass., at about $50,000.

*NEW YORK, N. Y.—Bids are asked by the Board of Water Supply, J. Waldo Smith, Ch. Engr., until 11 a. m., April 8, for contract No. 46, for the construction of a portion of the Catskill aqueduct, consisting of Millwood, Sarles, Harlem Railroad, Pleasantville and Reynolds Hill tunnels, Putnam siphon and Milwood-South, Sarles and Pleasantville cut-and-cover. The tunnels are 17 ft. high by 13⅓ ft. wide inside and aggregate about three miles. Of the remainder about 2.5 miles are standard cut-and-cover 17 ft. high by 17½ ft. wide inside, and about 2,000 ft. are cut-and-cover of special design. The work is located about four miles east of the Hudson River in the towns of New Castle and Mount Pleasant, Westchester County.

The Board of Water Supply has awarded contracts as follows: For contract No. 22, for the construction of a portion of the Catskill aqueduct, consisting of about one mile of tunnel on the hydraulic gradient, known as Bull Hill tunnel, 17 ft. high by 13 ft. 4 ins. wide inside, lined with concrete, and two short stretches of plain concrete conduit, known as cut-and-cover aqueduct, at the ends of the tunnel, about ½ mile long, 17 ft. high by 17½ ft. wide inside, situated in the town of Phillipstown, Putnam County, bids opened March 9, to PATTERSON & CO., Fitzsimmons Bldg., Pittsburg, Pa., at $824,942; for contract No. 23, for the construction of a portion of the Catskill aqueduct, consisting of 5,450 ft. of plain concrete conduit, known as Yorktown cut-and-cover, 17 ft. high by 17 ft. 6 ins. wide, and two tunnels, 17 ft. high by 13 ft. 4 ins. wide on the hydraulic gradient, having a combined length of 6,450 ft., and known as Hunter's Brook and Scribner tunnels, situated east of the Hudson River in the town of Yorktown, Westchester County, bids opened on March 11, to the GLYNDON CONTRACTING CO., 2 Rector St., at $1,109,102; for contract No. 47, for the construction of the Wallkill siphon, a deep pressure tunnel in rock, 14½ ft. inside diameter and about 23,400 ft. long, crossing under the valley of the Wallkill River, with six shafts from 350 to 480 ft. in depth, and adjacent grade tunnels, and stretches of plain concrete conduit known as cut-and-cover aqueduct, the work being located in the towns of New Paltz and Gardiner, Ulster County, bids opened March 18, to the DEGNON CONTRACTING CO., 60 Wall St., at $3,982,726. Other bidders were: John C. Rodgers, 121 W. 125th St. $5,190,777; Bradley Contracting Co., 1 Madison Ave., $5,353,755; Millard Construction Co., 2 Rector St., $5,564,262; S. Pearson & Son, Inc., Long Island City, $6,117,914; Mason & Hanger, Richmond, Ky., $5,237,820; Booth & Flynn and The Drave Contracting Co., Pittsburg, Pa., $5,247,766; American Pipe & Construction Co., 112 N. Broad St., Philadelphia, $5,386,070; Buffalo Dredging Co., Buffalo, $5,965,696. List of bidders for contracts Nos. 22 and 23 noted on March 11 and 18, respectively.

*NEW YORK, N. Y.—Bids were received by the Board of Water Supply on March 22 as follows for contract No. 24 for the construction of Turkey Mountain grade tunnel, situated about six miles northeast of Croton-on-Hudson in the town of Yorktown, Westchester County: Bradley Contracting Co., 1 Madison Ave., $973,694; S. Pearson & Son, Inc., Long Island City, $1,357,674; The Dravo Contracting Co., Pittsburg, $1,180,107; Gore-Meenan Co., 206 Broadway, $1,184,632; American Pipe and Construction Co., Philadelphia, Pa., $1,172,670; The Buffalo Dredging Co., Buffalo, N. Y., $1,218,275. J. Waldo Smith is Ch. Engr. Bd.

NIAGARA FALLS, N. Y.—The citizens on March 10 voted to expend $717,000 for a pure water supply, the work to include the construction of a new pumping station, laying an intake pipe 2,100 ft. into the river, building an intake crib and the installation of filters capable of supplying 15,000,000 gals. of water daily, etc. Noted March 11.

*PHILADELPHIA, PA.—All bids for the construction of the Queen Lane filtration plant have been rejected by the city. Estimated cost, $2,500,000. The plan is to utilize the present pumping station as the power plant for the system to pump the water from the Schuylkill River to the filter beds. It is proposed to build the 52 preliminary filters on the bank and 26 final filters over the present basin, using the basin itself for filtered water storage entirely. The plant, when completed will have a capacity of 80,000,000 gallons daily. New bids are asked until March 31. List of bidders noted on March 18. George R. Stearns is Dir. Pub. Wks.

FORT WASHINGTON, MD.—Bids will be received until noon, March 30, by H. L. Pettus, Constructing Q. M., U. S. A., Takoma Sub-station, D. C., for extension of water and sewer mains at Fort Washington.

LYNCHBURG, VA.—The contract for the erection of two reinforced-concrete reservoirs and laying mains to supply water on Thomas F. Ryan's Nelson County estate has been let to LANE BROS. CO. Estimated cost, about $20,000.

BRANDON, MISS.—The Brandon Water-Works Co. has been incorporated with $10,000 capital stock by Robert Burns, A. J. McLaurin, Jr., and L. S. May.

TOLEDO, OHIO.—The contract for constructing the conduit under Delaware Creek to bring the pure water down from the filtration plant was let on March 15 by the city to M. RABBITT & SONS, The Nasby, Toledo, at $18,512, exclusive of cost of pipe. Frank I. Consaul is City Engr.

CINCINNATI, OHIO.—The Board of Public Service on March 5 awarded to the U. S. CAST-IRON PIPE & FOUNDRY CO., 71 Broadway, New York, the contract to furnish the city with 70 tons of c.-i. pipe, at $20,914. Edwin Henderson is City Clk.

COLUMBUS, OHIO.—Bids will be received until March 26 by the Board of Public Service, Edward W. Hirsch, Secy., for about 500 tons of 6, 8 and 12-in. c.-i. pipe, five tons of special castings and 25 tons of pig lead.

SWANTON, OHIO.—The State Board of Health has approved detailed plans and specifications for the development of the public water supply.

LAWRENCEBURG, IND.—The Lawrenceburg Water Works Co., recently incorporated, is planning to construct and equip a modern water-works system. George Kunz is Pres.; Gustav Kestner, Secy., and W. H. O'Brien Treas.

SOUTH BEND, IND.—The City Council is considering plans for the improvement of the water-works plant. New reservoirs and the air lift system will be installed.

SALEM, IND.—Bids are asked by the Town Board until 7 p. m., April 5, for the construction and building the extension of water-works of the town, consisting of pipes for mains from the Skull Springs to the reservoir in west limits of corporation; gasoline engines and pumps to operate and raise the water; reservoirs built of stone; distance between terminal points about 4½ miles, excavation, etc. Bids will be received in parts, as follows: For the pipes, for the mains, for the pumps and engines, for building the reservoirs, and the excavating and laying the pipes. Eugene Routh is Town Clk.

EAST JORDAN, MICH.—W. B. CALDWELL, of Traverse City, has been awarded contract for building a new water-works system for East Jordan. Estimated cost, $20,000.

GRAND RAPIDS, MICH.—The following bids were opened on March 11 by the Board of Public Works for erecting at the water-works pumping station, one vertical triple-expansion pumping engine of 12,000,000 gallons daily: Allis-Chalmers Co., Milwaukee, Wis., $58,700; Bethlehem Steel Co., three bids, $66,000, $63,000 and $58,000; Hooven-Owens-Kentschler, two bids, $80,000 and $78,000; Platt Iron Works, $58,125; Wilson-Snyder Co., $63,400, R. D. Wood & Co., $92,000. L. W. Anderson is City Engr.

WAUKESHA, WIS.—The contract for furnishing c.-i. pipe, about 18,000 ft., bids opened March 4, has been awarded by the Water Commissioners to the LYNCHBURG FOUNDRY CO., of Lynchburg, Va., at about $10,000.

The contract for valves has been awarded to the RENSSELAER MFG. CO., of Troy, N. Y. Fred Phelps is Clk. Comrs.

MINNEAPOLIS, MINN.—The Water-Works Committee on March 19 voted to lay water mains to cost $67,000.

RED WING, MINN.—Bids will be received until March 30 by the city for drilling and casing a well. Estimated cost, $3,000. A E. Rhame is City Engr.

CANISTOTA (Canastota post-office), S. DAK.—Bids are asked until April 6 by J. A. McKinnon, Town Clk., for the construction of a water-works system.

McPHERSON, KAN.—Bids will be received by the Water and Electricity Department until April 20, for 6,000 ft. of 6-in., 33-lb., and 6,400 ft. of 4-in., 22-lb. standard c.-i. water pipe, 9,000 lbs. of lead, 250 lbs. of hemp and 15 hydrants of the following makes: Chapman, Ludlow, Fairbanks and Matthews, all f. o. b. McPherson.

RIVERTON, WYO.—The Wyoming Central Irrigation Co., which controls all of the water in the ceded portion of the Wind River reservation and which contemplates the reclamation of about 230,000 acres, has let to L. D. BORDEN a contract for constructing a 6-mile extension to the Riverton ditch. Work is to begin immediately.

FORT ASSINIBOINE, MONT.—Col. J. M. Sawyer, Ch. Q. M., U. S. A., St. Paul, has awarded contract to the CANTON BOILER & ENGINEERING CO., Canton, Ohio, for furnishing a 1,000,000-gallon steel tank and trestle at Fort Assiniboine, at $12,327.

GALLATIN, MO.—The city has voted $8,000 of bonds for the extension of water-works.

WAURIKA, OKLA.—The city has voted $25,000 of bonds for the extension of the water-works and $5,000 of bonds for larger wells for the water supply.

CANON CITY, COLO.—The City Council on March 1 authorized an additional issue of $100,000 of bonds for constructing water-works.

INGELWOOD (Denver post-office), COLO.—The town has awarded contract to the CONSOLIDATED ENGINEERING CO., of Denver, for the installation of a water-works system, the pumping plant to include two units, the first consisting of a triplex pump, connected to a 3-phase, 440-volt, 60-cycle motor, the second a horizontal centrifugal pump direct connected to a motor similar to that of the triplex pump. The pumps will have a capacity of 250 gallons per min. and will be automatically controlled by the Sundh Electric Company's regulators.

SANTA FE, N. MEX.—The Turley Ditch Co., Aztec, N. Mex., which intends to build extensive irrigation and power plants on the San Juan River, near the Colorado line, filed incorporation papers on March 5 with Nathan Jaffe, Territorial Secy., the incorporators being Aztec people. Capital, $600,000.

BELLINGHAM, WASH.—Plans and specifications for the new 18-in. water pipe line to extend from a point near Bay View Cemetery to James St., were presented to the Water Board on March 5 by the City Engineer. The line will be approximately 5,500 ft. long and will about parallel the present 16-in. line into the city.

YOAKUM (Pendleton post-office), ORE.—The Inland Irrigation Co. has made final purchase of an 800-acre tract of land on the Umatilla River near Yoakum and will construct a dam which will hold 10,000 acre ft. of water to be held in reserve for the use of the 10,000 acres of land of the Furnish Coe project. F. H. Marble is Engr. Estimated cost of dam, $64,000. Dr. W. E. Coe, of Portland, and W. J. Furnish, of Pendleton, are the promoters.

YUBA CITY, CAL.—The Board of Trustees has adopted plans and specifications for the pumping plant and station building for the municipal water system. Bids on these plans will be received until March 22.

SAN FRANCISCO, CAL.—The U. S. Cast-Iron Pipe & Foundry Co., Monadnock Bldg., was the only bidder on March 10 for furnishing pipe for the auxiliary fire protection system here at about $20.50, on the average, per ton. Marsden Manson is City Engr.

Two bids for seven more fire cisterns were opened by the Board of Public Works on March 12 and rejected. The bids were: Healy-Tibbitts Construction Co., 268 Market St., $41,850; the American Construction Co., 338 Pine St., $49,990.

MESA, ARIZ.—The contract for the construction of the new Highland Canal was let on March 6 to W. T. SMITH & CO., at $63,000. This work is to be completed before Nov. 1, 1909.

FALLON, NEV.—We are officially advised that the city is preparing to issue bonds for $35,000 for a water-works system. E. P. Osgood, City Engr., is preparing plans and specifications for a system consisting of 3½ miles of mains, gasoline engines and pumps of about 1,000 gallons capacity for fire service, overhead tank of about 100,000-gallons capacity, with bored wells 20 to 40 ft. deep for water supply.

OGDEN, UTAH.—We are officially advised that bids will probably be asked soon for the construction of an earthen distributing reservoir for the Water-Works Department. Estimated cost, $18,000. A. F. Parker is City Engr.

TORONTO, ONT.—Specifications are completed, it is stated, for the proposed filtration plant at the Island. Allen Hazen is Consult. Engr., 103 Park Ave., New York; C. H. Rush is City Engr.

WINNIPEG, MAN.—Bids will be received by Magnus Peterson, Secy. Civic Board of Control, until 11 a. m., March 27, for the supply of the brass goods required during the year for the city water-works department. Specifications and all information may be obtained from H. N. Ruttan, City Engr.

*PHILIPPINES.—Pipe and Specials.—See under U. S. Possessions.

SEWERAGE.

BROCKTON, MASS.—From three to five miles of pipe sewers will be constructed this year by day labor. The same amount of water pipe will probably be laid. Charles R. Felton is City Engr.

NORTH ANDOVER, MASS.—The citizens on March 6 voted to authorize the Board of Public Works to construct the west side sewerage system from the Merrimack River to Massachusetts Ave. and in contiguous streets. Joseph H. Duncan is Town Clk.

HARTFORD, CONN.—The Board of Finance has approved the matter of an extra appropriation of $12,000 for the completion of the Homestead Ave. intercepting sewer.

ROCKVILLE, CONN.—The Public Works Committee of the Court of Common Council will install about 500 ft. of sewer in East and Hale Sts. for the purpose of connecting up the Northeast District school building with the present sewer.

OSSINING, N. Y.—Bids are asked until 8 p. m., April 6, by R. A. Ward, Village Clk., for constructing two sections of the village sewer system.

*AUBURN, N. Y.—Bids will be received by C. A. Koenig, Mayor, until 8 p. m., April 20, for the construction of sewers and appurtenances. J. S. Hanlon is City Clk. W. Thos. Wooley is City Engr.

BUFFALO, N. Y.—The Mayor has approved the bill providing for an appropriation of $150,000 for work on the Swan St. sewer, necessitated by the government harbor work.

ROCHESTER, N. Y.—The Public Improvement and Finance Committee of Council on March 2 received plans from E. A. Fisher, City Engr., for disposal of the city's sewage by a pipe line direct to the lake, at a cost of about $1,100,000. The plans include the construction of a purification plant in Irondequoit, cost, $100,000, to reduce the sewage to solid form, probably by precipitating it with a limestone solution. The proposed line for the sewer is through Irondequoit from the northern limits of the city to 600 ft. west of Durand-Eastman Park, where it is to enter the lake, extending out about 7,000 ft. Plans are also being prepared for a new outlet sewer in the 19th Ward, from Elmdorf St. to Wellington Ave., Rosslyn St. and Warwick Ave. to Arnett St. and Bingham St.

COLLINGSWOOD, N. J.—The town has decided to construct a new sewage disposal plant and filter beds, and extend the pipe line about three miles. Estimated cost of plant, $10,000.

PERTH AMBOY, N. J.—The State Sewerage Commissioner has approved plans for a trunk sewer system to empty into the Raritan River at the foot of Sheridan St., to consist of sewers ranging from 6-in. pipe to a tunnel of brick and concrete of 7 ft. Estimated cost, about $80,000.

SALEM, VA.—The city has awarded contract to R. H. CARPER, of Salem, for the construction of sewers here. C. H. Kesler is Chn. Sewer Com.

MOULTRIE, GA.—The city's proposed sewer improvements will include laying about seven miles of 8-in., 10-in. and 12-in. sewer pipe. H. S. Jaudon, Savannah, Ga., is Engr.-in-Charge.

TAMPA, FLA.—The Board of Public Works has submitted a report on the estimated cost of public improvements contemplated as follows: Sewers in new territory, $40,000; sewers in old city limits, $10,000.

BIRMINGHAM, ALA.—C. M. BURKHALTER, Birmingham, has been awarded contract by the Jefferson County Sanitary Commission, at $12,096, for constructing sanitary sewer to extend from Elyton to West End.

*BIRMINGHAM, ALA.—Bids will be received by Maury Nicholson, City Engr., until 11 a. m., April 21, for the construction of certain storm sewer mains and branches thereto. Estimated cost, $230,000.

RAYMOND, MISS.—The Board of Supervisors has selected Walter G. Kirkpatrick, Consult. Engr., of Jackson, Miss., to prepare plans for the purification of the sewage for the county court-house.

MADISONVILLE, KY. — The city will construct a system of sanitary sewers. Jas. L. Brown is City Clk.

*OXFORD, OHIO.—All bids opened on March 9 by the city for the construction of a sewage disposal plant have been rejected. Riggs & Sherman Co., of Toledo, are Engrs.

AKRON, OHIO.—Bids will be received until March 26 by the Board of Public Service, Ray F. Hamlin, Secy., for constructing a sewer in a portion of Case Ave.

LOCKLAND, OHIO.—Bids will be received until noon, March 29, by the Village Council, Clifford E. Troy, Clk., for furnishing material and constructing a sewage disposal plant.

COLLEGE HILL (Cincinnati post-office), OHIO.—Bids will be received by F. R. Strong, Village Clk., until noon, April 12, for furnishing the necessary labor and materials for the construction of a sewage disposal plant and appurtenances, located on property in College Hill, formerly known as the R. F. Howard 20-acre tract.

CIRCLEVILLE, OHIO.—Bids are asked until April 15 by the County Commissioners for the construction of a disposal plant at the County Infirmary.

YOUNGSTOWN, OHIO.—Bids will be received by the Board of Public Service, until noon, April 2, for furnishing the necessary labor and materials for sewering Belleview Ave., between Williamson Ave. and Pyatt St. W. H. McMillin is Clk. Bd.

KENDALLVILLE, IND.—It is proposed to construct glazed pipe sewers on N. State St. Estimated cost, $5,000. W. E. Sawyer, of Albion, is Engr.

VINCENNES, IND.—The Governor has signed a bill authorizing the city to issue bonds for the construction of a sewerage system.

MUSKEGON, MICH.—Bids will be received until April 5 by Benjamin H. Tellman, City Recdr., for furnishing material and constructing certain sanitary sewers in Special Sewer district No. 6. Estimated cost, $12,235.

QUINCY, ILL.—REES BROS., Quincy, were awarded contracts on March 15 by the Board of Local Improvements for the construction of both sections of the North End sanitary sewer at $40,487. F. L. Hancock is City Engr.

FARMER CITY, ILL.—We are informed that the County Court has passed favorably on the ordinance and assessment roll for a combined system of sewers for a part of the city. There will be about 10,600 ft. of 8-in. to 33-in. sewer. The main will be of concrete. The depth of cut is from 7 ft. to 24 ft. Bids are invited. Wm. T. Smith, City Engr.

JEFFERSON, WIS.—Bids are asked by the Board of Public Works until 2 p. m., March 30, for the construction of sanitary sewers and appurtenances.

OSHKOSH, WIS.—Bids are asked by the Board of Public Works until 2 p. m., April 17, for constructing sewers in various streets.

SIOUX CITY, IOWA.—Bids will be received by A. A. Smith, City Clk., until April 13, for furnishing material and constructing reinforced-concrete diverting conduit, 8 x 10 ft., and about 2,600 ft. in length, for Bacon Creek.

ST. PAUL, MINN.—Contracts for the construction of sewers in Albemarle St., from Front to Geranium Sts.; in Cook St., from Woodbridge to Albemarle Sts., and in Front St., from Woodbridge to Albemarle Sts., were awarded on March 15 by the Board of Public Works to O'NEIL & PRESTON, at $4,993. Engineer's estimate, $6,147.

ST. PAUL, MINN.—The Board of Public Works has awarded contract for the construction of the Portland-Aldine sewer here to SCHREITER & CONNOLLY, St. Paul, at $131,519. The following bids were received: Schreiter & Connolly, $131,519; Fielding & Shepley, $153,850; O'Neil & Preston, $148,000; J. M. Thornton, $159,700; Forrestal & Feyen, $198,830; George J. Grant, $138,919; General Construction Co., $143,000.

CLAY CENTER, KAN.—Bids will be received by Guy R. Martin, City Clk., until March 29 for the construction of sewer mains. Guy R. Martin is City Clk.

ALLIANCE, NEB.—Andrew Rosewater, of Omaha, Neb., is preparing plans for the construction of pipe sewers. Estimated cost, about $45,000.

SAN ANTONIO, TEX.—A. C. Pancoast, Asst. City Engr., has completed plans and specifications for sewer construction in Prospect Hill Improvement District. Bonds for $45,000 have been voted. The plans call for the construction of 11.2 miles of sewers, pipe from 8 to 22 ins., 145 manholes and 20 combination manholes and flush tanks, a viaduct over Alazan Creek to have 150 ft. of 18-in. steel sewer pipe.

HOUSTON, TEX.—F. L. Dormant has been engaged by the city as special engineer to prepare plans for storm and sanitary sewer construction. Bonds for $225,000 for each have been voted. T. C. Tarver is City Engr.

HUBBARD, TEX.—The city has decided to construct a sewer system. Estimated cost, about $10,000. William M. Elliott is Engr., Corsicana, Tex. H. C. Bishop is City Secy.

*McALESTER, OKLA.—Bids are asked by the City Council until 8 p. m., April 15, for constructing sanitary and storm water sewers. Estimated costs: Sanitary sewers, $76,001; storm water sewers, $25,447. Also the Sandy Creek improvement, consisting of doing all the necessary excavating, filling, revetment, concrete sidewalls and bottom. Approximate length, 6,093 ft. Estimated cost, $40,000. J. M. Gannaway is City Clk.; J. Phelan, City Engr.

DENVER, COLO.—Bids are asked until 11 a. m., March 27, by the Board of Public Works for constructing storm sewers and appurtenances in sub-districts Nos. 2, 3, 4 and 6 of North Denver storm sewer district No. 1. The contract for each sub-district will be let separately. Engineer's estimate: Sub-district No. 2, $19,586; Sub-district No. 3, $18,650; sub-district No. 4, $23,300; sub-district No. 6, $21,734. W. B. Lowry is Pres. Bd.

*JULESBURG, COLO.—Bids are asked by Mark Burke, Mayor, until 10 a. m., April 3, for the construction of a sanitary sewer system for sanitary sewer district No. 1.

ALBUQUERQUE, N. MEX.—Bonds for $290,000 have been sold for the construction of the proposed sewer system. The Engineering Department is making surveys. Bids will probably be asked for in about one month. J. B. McManus is City Clk.

SEATTLE, WASH.—The City Council has passed ordinances, ordering the following local improvement work: East Boston St. and other streets, sewers, $26,000; Linden Ave. and other streets, sewers, $6,500. R. H. Thomson is City Engr.

SEATTLE, WASH.—Bids will be received by the Board of Public Works, until April 9, for the construction of sewers in Thorndyke Ave. and other streets. Estimated cost, $154,000.

TORONTO, CAN.—J. D. Watson, of Birmingham, England, and Rudolph Hering, 170 Broadway, New York, who were engaged by the city to investigate the sewage disposal problem, have submitted their report to the Council and recommend the following: (1) That the sewage disposal plant be constructed on Morley Ave. site; (2) that tanks be located close to shore line, south of Eastern Ave.; (3) that sewage be made to issue from a number of small openings in the outfall sewer to facilitate a high degree of dispersion and dilution; (4) that the intercepting sewer be constructed of Portland cement concrete with a vitrified brick invert; (5) that the proposal to establish a filtration plant be adopted; (6) that the plans of the sewage disposal works as amended be adopted. C. H. Rust is City Engr.

GARBAGE DISPOSAL.

BOSTON, MASS.—Guy C. Emerson, Supt. of Streets, on March 10, awarded contracts as follows for street cleaning and street watering: For the Dorchester district to JOHN H. WINSLOE, at $8,987 for cleaning the 80 miles of streets in this district between April 1 and Dec. 1, and $7.72 per day additional for street watering carts; for the West Roxbury district, about 78 miles of streets, to CHARLES J. JACOBS, 107 Terrace St., at $13,736 and $5 per day for watering carts.

CORAOPOLIS, PA.—Bids are asked by J. J. Burry, Chn. Public Safety Com., until 7.30 p. m., April 5, for the collection and disposal of garbage for a period of one year commencing May 1, 1909.

ROCKY RIVER, OHIO.—The city has decided to spend $25,000 for the construction of a reduction plant.

COLUMBUS, OHIO.—Bids will be received until March 31 by the Board of Public Service, E. W. Hirsch, Secy., for furnishing, delivering and installing for contract No. 4, machinery and equipment for the garbage reduction plant adjacent to the Scioto River, Franklin Township.

STREETS AND ROADS.

(denotes that this work is advertised in Engineering News.)*

EVERETT, MASS.—The city government has appropriated $20,000 for permanent pavement and $8,000 for sidewalks. Chris Harrison is City Engr.

NEW LONDON, CONN.—The contract for 7,000 sq. yds. of vitrified brick pavement on State St., bids opened on March 15, has been awarded to JAMES W. BOOTH, New London, at $2.69 per sq. yd., with a 5-year guarantee, and $2.65 without guarantee. Other bidders were: C. W. Blakeslee & Sons, New Haven, $2.85 and $2.75; John J. Ryan, New London, $2.88 and $2.80 Pierson Engineering & Construction Co., Bristol, $2.73 and $2.70; Connecticut Hassam Pavement Co., $2.89 and $2.80; G. H. Gill, $2.92 and $2.89; Fred T. Ley Co., Springfield, Mass., $2.88 and $2.83.

HARTFORD, CONN.—The court of Common Council has authorized the macadamizing of Pliny St., between Garden and Brook Sts., and Prospect Ave., north of Asylum Ave.

HARTFORD, CONN.—The Bd. of Finance has acted favorably on the matter of an appropriation for macadamizing Marlborough St. and on an appropriation of $31,500 for the extension of Church St.

NEW BRITAIN, CONN.—The Board of Public Works, Edward Wiegand, Pres., has asked for an appropriation of $15,000 to pave Main St. around the center of the city from the South Church to the railroad tracks.

FULTON, N. Y.—Bids will be received by W. A. Herrison, City Clk., until April 19 for about 32,000 sq. yds. of trap rock macadam pavement, 7,750 sq. yds. vitrified pavement and crosswalks, 18,600 lin. ft. cement curb and 4,800 lin. ft. storm sewer, 10 to 20 in., etc.

BUFFALO, N. Y.—The Park Commissioners on March 8 opened bids as follows for repaving a portion of Richmond Ave.: (a) using new curb, (b) using old curb: German Rock Asphalt & Cement Co., D. S. Morgan Bldg., asphalt pavement, (a) $83,770, (b) $76,000; Barber Asphalt Paving Co., 880 Ellicott Sq., with asphalt, (a) $109,177, (b) $107,339; Warren Bros Co., Boston, Mass., new pavement, (a) $97,523, (b) $92,807; resurfacing, (a) $82,835, (b) $77,919; Frank Bardol, D. S. Morgan Bldg., with macadam, (a) $69,000, (b) $63,000; Henry P. Burgard, Prudential Bldg., $99,250 for concrete base, (a) $103,000. F. G. Ward is Comr. Pub. Wks.

BINGHAMTON, N. Y.—Bids will be received until March 31 by the Board of Contract and Supply for paving Lewis St.

BROOKLYN, N. Y.—The Board of Estimate on March 5 adopted a new and modified plan for the paving of the Flatbush Ave. extension. Instead of finishing the street for the entire width, a strip on either side will be paved, leaving space in the center for the construction of so much of the Fourth Ave. subway as the Board decides to approve.

BROOKLYN, N.Y.—Bids are asked until 11 a. m., March 31, by Bird S. Coler, Boro. Pres., for regulating, grading, curbing and laying sidewalks on various streets; regulating, paving and repairing with asphalt on a concrete foundation and grading lots.

NEW YORK, N. Y.—Bids are asked until 2 p. m., March 31, by John H. O'Brien, Comr. Water Supply, Gas and Electricity, for furnishing materials, repairing and restoring artificial stone sidewalks and curbing and resetting natural stone curbing, for the completion of the contract abandoned by Thomas M. Hart.

No bids were opened on March 12 by John F. Ahearn, Pres. Boro. Manhattan, for furnishing material and building an extension and improving Riverside Drive, from West 155th St., to connect with the proposed Hudson Memorial Bridge, together with all work incidental thereto, including the construction of the Fulton Viaduct at Dyckman St., the opening having been held up by an injunction. Cost of proposed work, about $4,500,000. F. Stewart Williamson is Consulting Engr., 84 William St.

The following bids were opened on March 11 by the Park Board for furnishing and delivering gravel on parks and parkways, in Manhattan Borough: Jacob E. Conklin, 299 Broadway, $19,500; John Fleming, 169 Broad St., $20,150; John A. McCarthy, Rivington St. and East River, $18,800; John B. Rose Co., foot of West 52d St., $21,900; Roger L. Young, 17 Battery Pl., $19,700.

NEW YORK, N. Y.—Bids are asked by George Cromwell, Pres. Boro. of Richmond, until noon, April 6, for regulating, paving and constructing gutters, etc., in Borough of Richmond.

ATLANTIC CITY, N. J.—Bids are asked until 11 a. m., April 7, by the Board of Chosen Freeholders of Atlantic County for grading and graveling the Northfield and English Creek road. E. D. Rightmire is County Engr.

*BAYONNE, N. J.—Bids will be received by the City Council until 8 p. m., April 6, for all of the labor and material for the improvement of 44th St., from Ave. B to C, and of 48th st., from Ave. C to E. There will be required about 8,000 sq. yds. of brick paving, together with curbing and other appurtenances. W. C. Hamilton is City Clk.

SHAMOKIN, PA.—Bids will be received until April 14 by W. H. R. Smink, Ch. Burgess, for paving with vitrified brick on a 6-in concrete foundation, and curbing portions of eight streets, paving Sixth St. with Trinidad asphaltum and repairing and sheeting Shamokin St. with asphaltum.

WILKES-BARRE, PA.—Bids will be received by Fred H. Gates, City Clk., until 2 p. m., March 29, for furnishing material and labor for street paving, grading and curbing. B. K. Finch is City Engr.

OIL CITY, PA.—Bids are asked until March 31, by S. C. Jones, Boro. Clk., for grading, curbing and paving West First St., the work including the following: Excavation, 25,600 cu. yds.; earth gravel foundation, 11,500 cu. yds.; brick, 21,900 sq. yds.; curbing, cement or stone, 8,950 lin. ft.; edge stone, 450 lin. ft.; culverts, 55 cu. yds.; retaining walls, 255 cu. yds.; drain tiles, inlets, etc. E. H. Pierce is Boro. Engr., 616 North St.

BALTIMORE, MD.—Bids are asked by the Board of Awards until 11 a. m., March 31, for grading, curbing and paving various streets. B. T. Fendall is City Engr.

FAYETTEVILLE, N. C.—The city will pave the cross streets of the business section with stone for a distance of 30 ft. from the main thoroughfare.

NEWBERN, N. C.—The city has awarded contract to BOWE & PAGE, Charleston, S. C., at $1.54 per sq. ft. for paving about ten blocks with Carlyle vitrified brick. G. T. McCarthy is Chn. St. Com.

SAVANNAH, GA.—Bids will be received until March 29 by the Director of Public Works for furnishing 22,000 lin. ft. straight and 2,000 ft. of circular curb, 35,000 sq. yds. of vitrified paving brick, and 65,000 sq. yds. of asphalt paving block.

NEWPORT, TENN.—The Cocke County Court has authorized a $20,000 bond issue for road improvements.

BLOUNTVILLE, TENN.—The State Senate has passed a bill authorizing Sullivan County to issue $300,000 of bonds for road improvements, additional to $100,000 previously authorized. The County Court, under provisions of this measure, it is stated, has authority to issue an additional $300,000 in bonds without submitting such a proposition to the vote of the people.

LORAIN, OHIO.—Bids will be received by the Board of Public Service until March 29 for furnishing material and constructing sidewalks and crosswalks that become delinquent during the year 1909.

CLEVELAND, OHIO.—Bids will be received by the Secretary of the Board of Public Service until noon, March 31, for furnishing about 90,000 ft. B. M. of all heart wood, long leaf yellow pine paving blocks. W. J. Springborn is Pres. Bd.

Bids are asked until 11 a. m., April 10, by the County Commissioners for grading, draining and paving a portion of North Woodland road.

Bids will be received by County Commissioners until 11 a. m., April 17, for grading, draining and paving Center road No. 3, from Mayfield road to Kinsman road, in Cleveland Heights, Euclid and Warrensville Townships. A. B. Lea is County Surv.

TOLEDO, OHIO.—Bids will be received by D. T. Davies, Jr., of Lucas County, until 10 a. m., April 9, for all labor and furnishing all materials required for the repair of Detroit Ave. stone road No. 2, from Sylvania Ave. to Lagrange St., Washington Township.

YOUNGSTOWN, OHIO.—Bids will be received by the Commissioners of Road District No. 1 of Mahoning County, Youngstown, until 1.30 p. m., March 27, for furnishing material and labor for the improvement by grading of the Bears Den Road, Section No. 1, in said district.

EVANSVILLE, IND.—The Board of Public Works will soon ask for bids for the construction of a 15-ft. concrete boulevard in Sunset Park.

INDIANAPOLIS, IND.—The Board of Public Works is having plans prepared, upon which bids will be asked for street improvement to cost about $55,000. B. H. Miller is City Engr.

INDIANAPOLIS, IND.—The Indianapolis Motor Speedway Co. has incorporated with a capital of $250,000. The company will let contracts on bids for the construction of a speedway and the improvement and ornamentation of an amusement park. Carl G. Fisher, J. A. Allison and F. H. Wheeler are directors.

MUNCIE, IND.—Bids [illegible] asked by the Commisioners of Delaw[illegible] County until 10 a. m., April 7, for the [illegible]ruction of the Strong macadam road [illegible] Delaware Township. Joseph E. Davis i[illegible]nty Audr.

MUNCIE, IND.—Bids [illegible] received by the Commissioners of D[illegible] County until 10 a. m., April 7, for [illegible] construction of two gravel roads in Delaw[illegible] Township. J. E. Davis is County Audr.

CROWN POINT, IND.—[illegible] are asked by the Commissioners of [illegible] County until noon, April 5, for the [illegible]ruction of a gravel road in Ross Tow[illegible] Chas. A. Johnson is County Audr.

LOGANSPORT, IND.—B[illegible] are asked by the Commissioners of C[illegible] County until noon, April 5, for the co[illegible]ction of the Dykeman gravel road in [illegible] Township. George W. Cann is County [illegible]

COLUMBUS, IND.—Bids [illegible] asked by John M. Davis, Audr. Bartholom[illegible] County, until 10 a. m., April 5, for the [illegible]struction of one mile and 1,653 ft. of [illegible] gravel road in Flat Rock Township, know[illegible] the Norton road.

PETERSBURG, IND.—Bi[illegible] asked by the Commissioners of Pike [illegible]nty until 2 p. m., April 6, for the con[illegible]tion of the folowing gravel roads in P[illegible] Township: Road No. 1, 2¾ miles, a[illegible] Road No. 5, three-quarters of a mile in [illegible]gth, respectively. Frank R. Bilderb[illegible] is County Audr.

WINAMAC, IND.—Bids ar[illegible]ked by the Commissioners of Pulaski Co[illegible] until April 6, for the construction of tw[illegible] gravel roads, one in Franklin Township an[illegible] in Tippecanoe Township. Ellis S. R[illegible] is County Audr.

HARTFORD CITY, IND.—Bi[illegible] are asked by the Board of Commissioners of Blackford County until 2 p. m., April 5, for the construction of 13,282 ft. of macadamized road in Harrison Township, and for the construction of 5,255 ft. of macadamized road on line dividing Licking and Washington Townships. L. W. Daugherty is County Audr.

HARTFORD CITY, IND.—Bids are asked by L. W. Daugherty, Audr. Blackford County, until 10 a. m., April 5, for the construction of 10,030 ft. of macadam road in Licking Township.

NOBLESVILLE, IND.—Bids are asked by the Commissioners of Hamilton County until 1 p. m., April 9, for the construction of two joint gravel roads dividing Hamilton and Marion Counties, known as the Moffitt and the Hoss gravel roads, 10,770 and 10,475 ft. in length respectfully. W. W. Cowgill is Audr.

FOWLER, IND.—Bids are asked by Lemuel Shipman, Audr. Benton County, until 1 p. m., April 6, for the construction of the following stone roads: Balensiefer road, graded and paved a width of 9 ft. with crushed stone a depth of 10 ins., estimated cost, $9,000; Carson road, paved a width of 9 ft. with crushed limestone a depth of 7 to 10 ins., estimated cost, $5,360; Cones road, graded and paved a width of 9 ft. and depth of 6 ins. with crushed limestone, estimated cost, $4,000; Cyr road, graded and paved with gravel to a width of 9 ft. and a depth of 12 to 14 ins., estimated cost, $6,312; Creek road, graded and paved with gravel 9 ft. wide, and 15 ins. deep, estimated cost, $9,710.

MENOMINEE, MICH.—Bids will be received by the City Clerk until March 29 for certain paving and sewer work required during the year 1909.

TOMAH, WIS.—Bids are asked until 2 p. m., April 16, by D. J. Aller, City Clk., for constructing brick pavement.

MILWAUKEE, WIS.—Bids are asked until 10.30 a. m., March 26, by the Board of Public Works, Charles J. Poetsch, Chn., for constructing asphalt pavement on a concrete base on portions of Twelfth St. and Teutonia Ave.

WEBSTER CITY, IOWA.—All bids opened on March 8 by the city for 25,000 sq. yds. of brick block paving have been rejected. New bids will be received. P. M. Banks is City Clk.

KEOKUK, IOWA.—Bids are asked until noon, March 31, by H. T. Moore, Clk. of Council, for grading, curbing and paving on Main St., the work including 600 cu. yds. of excavation, 1,880 sq. yds. of brick pavement and 676 lin. ft. of stone curb.

NEWTON, IOWA.—The city on March 10 awarded contract to WILLIAM HORRABIN, of Iowa City, for 20,000 sq. yds. of paving. The contract will amount to about $40,000. Work will commence before April 8 and be completed by August.

DAVENPORT, IOWA.—The Board of Local Improvements on March 15 awarded contract for paving Ninth St., from Third to 18th Ave., to the TRI-CITY CONSTRUCTION CO., of Davenport, at $15,0[illegible]

DAVENPORT, IOWA.—The City Council on March 5 rejected all bids for grading Tenth St., between Warren and Marquette St., south from Division to Davie St., and a block on Davie St., McKinley Ave. from Bismark St. to the railroad tracks, Davie St. in front of Fejervary Park and 15th St. from Warren to Marquette Sts.

GRINNELL, IOWA.—JOHN SPENCER has been awarded contract by the city at 10 cts. per sq. ft. for cement walks and 11 cts. per sq. ft. for brick.

INDEPENDENCE, KAN.—Bids will be received by J. D. Kramer, City Clk., until April 7, as a whole or separately, for paving portions of five streets, requiring about 41,970 sq. yds. of brick pavement, 1[illegible],536 lin. ft. of concrete curb and gutter, combined.

LAWRENCE, KAN.—Bids are asked by F. D. Brooks, City Clk., until 5 p. m., April 5, for grading, paving and curbing several streets.

LITTLE ROCK, ARK.—Bids will be received until 2 p. m., April 1, by the Paving Commission of the Louisiana St. District, at

the office of E. A. Kingsley, City Engr., for asphalt paving on a concrete base. Estimated cost, $[illegible],000.

DALLAS, TEX.—The Municipal Commissioners have decided to pave East Elm and Harwood Sts., probably with bitulithic. J. M. Preston is City Engr.

OLYMPIA, WASH.—Bids will be received until April [illegible] by the city for paving Washington, Franklin, Adafs, Fifth and Sixth Sts. Estimated cost, about $96,000. J. R. Dever is City Clerk.

SEATTLE, WASH.—R. H. Thomson, City Engr., has estimated the cost of the following improvements: Vine St. and other streets, asphalt paving, $67,500; Occidental Ave. and other streets, planking, $4,400; Roy St. and other streets, asphalt paving, $5,500.

SEATTLE, WASH.—R. H. Thomson, City Engr., has estimated the cost of street improvements as follows: 30th Ave. South and other streets, grading and curbing, $15,500; Ravenna Boulevard and other streets, same, $11,6[illegible]; Calhoun St. and other streets, same, $58,[illegible]; Valley St. and other streets, concrete walks, $12,300; 32nd Ave. N. E. and other streets, grading and curbing, $20,000.

SACRAMENTO, CAL.—F. E. FREY, of San Francisco, has been awarded contract for macadamizing Auburn Road, between Sacramento and Placer Counties, bids opened on March 14, at the following prices: 43,770 cu. yds. earth excavation and excess fill, 37 cts.; 1,800 cu. yds. earth overhaul, 5 cts.; 26,161 tons macadam, $1.90; 5,700 bbls. asphaltic oil, heating and placing, 35 cts.; 870 lin. ft. 12-in. pipe culverts, 80 cts.; 177 lin. ft. 14-in. pipe culverts, 90 cts.; 411 lin. ft. 18-in. pipe culverts, $1.10; 45 lin. ft. 24-in. pipe culverts, $1.25; 34 lin. ft. 2 × 2-ft. box culverts, $2.20; 62 lin. ft. 1½ × 3-ft. box culverts, $3; 70 lin. ft. 2 × 4-ft. box culverts, $4; 32 lin. ft. double 2 × 2-ft. 6-in. box culverts, $5.50; 35½ lin. ft. double 2-ft. 6-in. × 3-ft. box culverts, $6; 21½ lin. ft. 7 × 9-ft. box culverts, $15; 5,308 B. M. ft. redwood lumber in trestles, $45; 14,906 B. M. ft. Oregon pine lumber in trestles, $35; 110 cu. yds. plain concrete lumber in trestles, $8.50. Total, $72,301. Other bidders were: Clark & Henry Construction Co., Sacramento, $73,135; James Touhey, Sacramento, $77,949; Cotton Bros., Oakland, $80,904; Lewis Moreing, Stockton, $90,275; O'Brien & Mahoney, Sacramento, $84,165; Ransome-Crummey Co., Oakland, $106,113; McGilivary Construction Co., Sacramento, $84,852. The same firm also secured contract for 5,700 bbls. of oil for the road at $1,215 per bbl. or $6,925.

SALT LAKE CITY, UTAH.—Bids are asked until 8 p. m., March 26, by the Board of Public Works, L. C. Kelsey, City Engr., for repairing street pavements that may be ordered by the City Council until Dec. 31, 1909.

MANUFACTURING PLANTS.

(denotes that this work is advertised in Engineering News.)*

WORCESTER, MASS.—The Wire Goods Co., 28 Union St., is to erect a 6-story building in the rear of the present factory. The new building will be of brick and will be 80 × 60 ft., and when complete, will give the company a floor space of 110,000 sq. ft. Reginald Washburn is Pres.

SALEM, MASS.—The Naumkeag Steam Cotton Co., of this city, will begin immediately the construction of a weaving room. The new building will be 250 ft. long and 200 ft. wide. Several of the company's tenement houses will be torn down to make room for the new building. The cost will be between $50,000 and $100,000.

NEW BEDFORD, MASS.—Walter H. Langshaw will construct additions to the Dartmouth Mfg. Co.'s plant. A 2-story weaving mill and a spinning mill of three stories is to be erected. The basement is to be built north of the new weaving mill and in the northeast corner of the present group of buildings, comprising the Dartmouth plant.

LAWRENCE, MASS.—The Brightwood Mfg. Co., of North Andover, manufacturers of worsted dress goods, has had plans and specifications prepared for a new mill, to be erected on the Lawrence side of the Shawshin River, just over the boundary line. The structure will be of brick, about 250 ft. long, 80 ft. wide, two stories in height, and embracing the most modern equipment.

LOWELL, MASS.—The United States Worsted Co., the new $6,000,000 fine worsted goods corporation that includes the Musketaquid Mills of this city, will build a very large modern mill here in the near future. Its headquarters, outside of the New York office, will be at Lowell.

ADDISON, CONN.—Erection of an addition to No. 1 Mill is planned by the Glastonbury Knitting Co. here. The new structure will be four stories high, 60 × 60 ft. The present mill is equipped with 40 knitting and 100 sewing machines, and gives employment to 175 hands.

BUFFALO, N. Y.—The Wheeler Elevator Co., Albert J. Wheeler, Pres. Western Savings Bank Bldg., will build a steel frame, reinforced-concrete bin elevator on the Buffalo River at Ganson St. The building will be 134 × 80 ft., 105 ft. high, with 33 bins 80 ft. high and 700,000 bushels capacity. Plans have been prepared by Harry A. Waite, Monarch Engineering Co., Chamber of Commerce Bldg. Contracts for piling and excavation have been let.

GOWANDA, N. Y.—The STANDING CONTRACTING CO., this city, has been awarded general contract by the State Commission in Lunacy, T. E. McGarr, Secy., for construction of a cold storage building and storeroom for the Gowanda State Homeopathic Hospital, Gowanda, N. Y., at $20,900. F. B. Ware, Capitol, Albany, N. Y., is State Arch.

BUFFALO, N. Y.—The George J. Meyer Malting Co. will erect a new malt house at 1314 Niagara St., adjoining its present plant on the New York Central R. R., to be of brick, concrete and steel construction, 50 x 150 ft., 85 ft. in height; also a 4-story brick office building. Total cost, $100,000. Emerson C. Dell, 402 D. S. Morgan Bldg., is Arch.

The Guilford Mfg. Co. will build a 3-story factory, 50 × 185 ft., on Guilford St. near Sycamore St., brick composition roof. Esenwein & Johnson, Archs., 775 Ellicott Sq., have completed plans and are receiving bids.

FULTON, N. Y.—The American Woolen Co. will erect in this city a yarn mill to be used in connection with all the mills in the combine. Cost, $1,000,000. The contract has been let for the construction work, which will be commenced soon.

GARFIELD, N. J.—The Robertsford Worsted Mills, in this town, are to be rebuilt and enlarged. Brick will be used in one and 3-story construction, providing 25,000 sq. ft. of floor space.

NORTH EAST, PA.—The Grape Products Co., of Erie, Pa., will build a 3-story brick and concrete factory, 112 × 401 ft., and a 1-story power-house, 60 × 45 ft., here this spring. The owners will purchase all materials and will do all concrete and cement work. Ballinger & Perrot, 1200 Chestnut St., Philadelphia, Pa., will receive bids for other work. Cost, $300,000.

BALTIMORE, MD.—We are officially advised that the Sagax Wood Co., 106 Dover St., Baltimore, will build a plant to manufacture imitation wood, probably in this city. There will be three 1-story fireproof buildings, measuring 50 × 200 ft., 25 × 30 ft. and 20 × 30 ft. They will be built of steel and sagax. Cost of buildings, $20,000. The machinery will consist of a 300-HP. power plant, pulverizing and mixing machines and hollow tile press. Cost, $30,000. Fireproof imitation wood in the form of fire doors and shutters, fireproof corridors and partition doors and partition tile will be produced. The capacity will be 25 tons a day, equal to 6,000 sq. ft. fire doors. The date for letting contracts has not been set. The plant will be erected within three months. The officers are: J. Henry Miller, Pres.; C. W. Slough, Jr., Secy.; William H. Morrow, Treas.; H. G. Perring, Gen. Mgr., all of Baltimore. A. Henry Krone, 106 Dover St., is Arch.

DANVILLE, VA.—The Dan River Power & Mfg. Co., Danville, have decided to build an additional mill here. This mill will comprise a 3-story building, 150 × 550 ft., equipped with 50,000 spindles and 1,500 looms. It will be operated by electric power generated by water, with steam auxiliary. Lockwood, Greene & Co., Boston, Mass., are Archs.-in-charge. The new plant will cost approximately $1,000,000. The company will increase its capital stock from $3,000,000 to $3,500,000.

WELLFORD, S. C.—The Jordan Mfg. Co., of this city, will increase its capital stock and install new spindles. This addition will enable the company to produce the yarns consumed by its 50 looms in weaving towels and bedspreads. Electric power is used.

LA FAYETTE, GA.—The management of the La Fayette Cotton Mills, La Fayette, Ga., has obtained plans for an enlargement of the plant. It has been decided to add 2,000 spindles and 40 looms, with other necessary accompanying machinery at a cost of probably $50,000. A slasher room will be erected. Construction will be arranged for soon. The company is operating 5,000 spindles and 160 looms on the production of sheetings and drills.

LAGRANGE, GA.—The contract for constructing Unity Mill No. 2, to be located on the belt line circling the southwest section of Lagrange, has been let to JOHN F. GRANLY & SONS, of Greenville, S. C., and is to be completed by Aug. 15. This building is to be a duplicate of Unity Mill No. 1, and 132 × 290 ft. in size, two stories high, with a 15-story 5-section warehouse and opening room adjoining. One hundred cottages will be erected near the mill for the residences of the employes.

MANCHESTER, GA.—The contract for constructing the Manchester Cotton Mill to be located at Manchester, Ga., on the Atlanta, Birmingham & Atlantic R. R., has been let to the PIKE BROS. LUMBER CO., of Lagrange, Ga. The main structure will be three stories high, of mill construction, 100 × 450 ft., to be equipped with 20,000 spindles and 500 looms for manufacturing cloth. About 750 HP. will be required to operate the plant. Fuller E. Callaway, of Lagrange, is Pres. A. F. Walker, Austell Bldg., Atlanta, Ga., is Engr-in-Charge, and Roy Dallis, of Lagrange, will be in charge of construction. The company is capitalized at $500,000. Noted on Feb. 25 under Lagrange, Ga.

TOLEDO, OHIO.—The General Electric Co., which some time ago purchased the factory building of the Toledo Moulding Co., near Champlain and Chestnut Sts., and is operating an incandescent bulb plant there, is contemplating an addition to the building that will cost $100,000. The structure to be erected will be 300 × 83 ft. and four stories high. It will be of reinforced-concrete construction. Work is to be started on the structure as soon as the company secures from City Council the vacation of the head of Mulberry St., the thoroughfare at this point not being in use.

TOLEDO, OHIO.—The Toledo Machine & Tool Co. has awarded the contract to the H. J. SPIEKER CO. for the erection of a 3-story addition to its plant at Hastings St. The building is to be of mill construction, with walls of brick, and will be 100 × 156 ft. in size. It will be erected on the north end of the present building. The contract calls for the completion of the building by May 15. The addition is to be used as a machine shop in which will be installed a traveling crane weighing 60,000 lbs. The crane will have a traveling space of 300 ft. extending 150 ft. into the old building.

BEDFORD, IND.—J. A. COLEMAN has been awarded a contract to build a stone mill for the Igle Stone Co. The BEDFORD FOUNDRY & MACHINE CO. was awarded the contract for the manchinery, boilers, engines, belting, etc., and the STONE CITY STEEL CONSTRUCTION CO. the iron work.

DULUTH, MINN.—Press reports state that it is reported that the U. S. Steel Corporation plans immediate work upon the erection of a steel plant to be located at Duluth, Minn. This plant will cost about one-half as much as the Gary plant, as plans now call for an expenditure of about $30,000,000. The U. S. Steel Corporation purchased and cleared 1,000 acres of land on both the Minnesota and Wisconsin sides of the St. Louis River within three miles of Superior. The same construction crews which worked on the new steel plant at Gary have been ordered to Superior to begin active work on this construction when spring opens. This plant will be supplied with electric power from the St. Louis River, obtainable from the Great Northern Power Co. A city patterned after the new city of Gary, Ind., will grow out of the present plans. The first instalment of $14,500,000 has been set aside by the Steel Corporation for this work.

WELLAND, ONT.—The Berniss Bay Co. has purchased 91 acres of land here as a site for factory and workmen's dwellings and will have plans prepared for necessary buildings at once.

WINNIPEG, MAN.—The Dominion Bridge Co., of Lachine, Que., is having plans prepared for a large steel plant to be erected here.

The Atlas Elevator Co., with headquarters in this city, will erect nine grain elevators along the route of the Grand Trunk Pacific R. R. this spring.

LETHBRIDGE, ALTA., CAN.—The Lethbridge Brewing & Malting Co. is having plans prepared for a malt house to be erected this spring. Cost, $75,000.

MISCELLANEOUS CONTRACTS.

(denotes that this work is advertised in Engineering News.)*

U. S. RECLAMATION SERVICE.—Items regarding irrigation, canal projects, etc., will be found under Water Supply—Irrigation.

*CREEK IMPROVEMENT.—McAlester, Okla.—See item under Sewers.

JETTIES.—Fort Screven (Tybee post-office), Ga.—Bids will be received until March 26 by the Constructing Quartermaster, U. S. A., for constructing riprap jetties.

*REMOVING WRECK.—New York, N. Y. —Bids are asked until noon, April 23, by Lieut.-Col. S. W. Roessler, Corps Engrs., U. S. A., for removing the wreck of the steamship "Finance."

CULVERT PIPE.—Mount Gilead, Ohio.—Bids are asked until April 5 by the County Commissioners for furnishing iron culvert pipe for Morrow County. W. C. McFarland is County Audr.

*AUTOMATIC ANCHORS.—Fort Totten, N. Y.—Bids are asked by the Disbursing Officer, Torpedo Dept., Fort Totten, until noon, April 15, for furnishing and delivering 730 c.-l. automatic anchors.

LUMBER.—Wheeling, W. Va.—Bids are asked by Capt. F. W. Altstaetter, Corps Engrs., U. S. A., Wheeling, until March 26, for 545 M ft. B. M. of hemlock lumber, to be delivered at Dam 26, near Point Pleasant.

CEMENT.—Cornwall, Ont.—The VULCAN PORTLAND CEMENT CO. has been awarded a contract to supply about 46,000 bbls. of cement to the Department of Railways and Canals, for use on the Lachine and Cornwall Canals.

PIER.—San Francisco, Cal.—Bids were received on March 15 by the Harbor Commissioners for Pier 34. The contract was let to the ASSOCIATED CONTRACTING CO. The Western Pacific Ry. Co. has paid $167,730 for the work.

CANALS.—Springfield, Ill.—The KNIGHT & BOWEN CONSTRUCTION CO., of Madison, has secured contract for building five seepage canals in connection with the Illinois-Mississippi barge canal, known as the Hennepin Canal.

RAILS.—Ottawa, Ont.—The Commissioners of the Transcontinental Railway recently awarded contracts for steel rails as follows: For 105,695 tons, to the DOMINION IRON & STEEL CO., Sydney, N. S., and 69,123 tons to the ALGOMA STEEL CO.

*WIRE FENCE.—Fort Meade, S. Dak.—Bids are asked by the Constructing Quartermaster until 10 a. m., April 19, for the construction, complete, of approximately 27 miles of barbed wire fence around the Fort Meade, S. Dak., Military Reservation.

*LOCK.—Cincinnati, Ohio.—Bids are asked until 2 p. m., April 23, by Lieut.-Col. J. G. Warren, Corps Engrs., U. S. A., for constructing Lock No. 13, Kentucky River; three dwellings, three outhouses, three cisterns and one office building, near Willow, Ky.

RETAINING WALL.—Albany, N. Y.—Contract has been let by Franklin B. Ware, State Arch., for erection of retaining wall on the site of new State Education Building to the W. SHELTON SWALLOW CO., 27 Fifth Ave., New York. Cost, about $40,000.

RETAINING WALL, ETC.—Wilkes-Barre, Pa.—Bids are asked by the Street Committee, until noon, March 29, for furnishing all labor and materials and erecting a stone retaining wall, steps, etc., on North Sherman St., in the Third Ward of the City of Wilkes-Barre.

CEMENT, MACHINERY—Qu'Appelle, Sask. —Bids will be received by J. C. Starr, Secy.-Treas., until March 31, for the supply of 500 sacks of good cement, 60 slush scrapers, capacity seven cu. ft., and four wheel scrapers, capacity, 14 cu. ft. Bids will be received for the whole of the above or any part.

RETAINING WALL.—New York, N. Y.—Bids are asked until noon, April 6, by George Cromwell, Pres. Boro. of Richmond, for furnishing all the labor and materials required for constructing a reinforced-concrete retaining wall on Stuyvesant Pl., and other work in connection with the St. George ferry approach.

PIER.—San Francisco, Cal.—Bids will be received by the Bd. of State Harbor Commissioners, Union Depot and Ferry House, San Francisco, until April 8, for furnishing material (except cement and track rails with fish plates) for the construction of Pier 36. W. B. Thorpe is Secy. Ralph Barker, Asst. State Engr.

MEMORIAL.—Gettysburg, Pa.—Bids will be received by the Gettysburg Battlefield Memorial Commission at the office of General St. C. A. Mulholland, Post-office Building, Philadelphia, Pa., until noon, April 17, for complete construction of the Pennsylvania Memorial at Gettysburg. W. Liance Cottrell, 44 East 23d St., New York, N. Y., is Arch.

*LOCK GATES.—Brownsville, Pa.—Bids were received March 17, by Maj. H. C. Newcomer, Corps Engrs., U. S. A., for building lock gates and lock-operating machinery for Lock 5, at Brownsville, Pa., on the Monongahela River. The contract has been let to the J. & J. B. MILHOLLAND CO., 714 Fifth Ave., Pittsburg, Pa. Cost, about $15,000.

DITCH.—Crookston, Minn.—Bids were received on March 18 by H. J. Welte, County Audr., for constructing Ditch No. 79, requiring about 35,650 cu. yds. excavation. The contract has been awarded to JOHN STONE and WILLIAM S. GREEN, Monadnock Bldg., Chicago, Ill., at 13½ cts. per cu. yd. Total, $4,814. Orvis Hinds, Crookston, is Engr.

LANDSCAPE WORK.—New York, N. Y.—Bids are asked until noon, April 1, by the Board of Trustees of the College of the City of New York, 17 Lexington Ave., for the landscape work about the buildings of the College of the City of New York, located on St. Nicholas Terrace, 140th St., Amsterdam Ave. and 138th St., Borough of Manhattan, City of New York.

*MINE SHAFT.—Jeddo, Pa.—Bids are asked by the G. B. Markle Co., of Jeddo, Pa., until 2 p. m., April 3, for sinking a 3-compartment hoisting shaft at Jeddo No. 4 Colliery. The shaft is to be 24 ft. 6 ins. by 16 ft. 2 ins. in rock. The surface clay is 35 ft. deep and is to be lined with reinforced concrete from the rock to a point ten feet above surface. Depth of shaft, 190 ft.

PILE DRIVING, ETC.—Lawrence, Kan.—Bids are asked by F. D. Brooks, City Clerk, until 5 p. m., April 5, for furnishing materials and constructing bank protection on the south side of Elm St., between Bridge and Rhode Island Sts., in North Lawrence. The work will require furnishing and driving 36 piles and furnishing and placing 10,500 ft. B. M. of wales and planking, more or less.

FIRE HOSE.—New Haven, Conn.—Bids were received on March 16 by the Board of Fire Commissioners for fire hose. Contract has been awarded to the C. C. C. FIRE HOSE CO., Canton Junction, Mass., for 64 cts. per ft. Other bidders were: Eureka Fire Hose Co., Boston, Mass., 67½ cts.; Diamond Fire Hose Co., 1876 Broadway, New York, 79 cts.; Fabric Fire Hose Co., New York, 64¾ cts.; Voorhees Rubber Co., 75 cts.

BENCHES, SOD, SAND.—New York, N. Y. —Bids are asked by the Park Board at the office of the Department of Parks, until 3 p. m., April 1, for furnishing and erecting new stationary benches around the Music Stand on the Mall in Central Park, Boro. of Manhattan; for furnishing and delivering 500,000 sq. ft. of clean grass sod for parks and parkways in the Borough of Manhattan and for furnishing and delivering 540 cu. yds. of clean white beach sand for play grounds in the Borough of Manhattan. Henry Smith is Pres.

QUAY WALL.—Portsmouth, N. H.—Bids were received as follows on March 20 by the Bureau of Yards and Docks, Navy Dept., Washington, D. C., for the extension to the quay wall on the west side of entrance to Dock No. 2, extending the present wall about 162 ft. Bids are asked (a) for wall complete, (b) for wall complete to Section 11, omitting the return and leaving the end of the wall steeped down, (c) price for each foot of additional wall: Thomas Fitzgibbon, Beverley, Mass., (a) $42,000, (b) $37,088, (c) $272; Roy H. Beatty, Fall River, Mass., (a) $59,402, (b) $36,854, (c) $347.

REPAIRING PIER, ETC.—New York, N. Y.—Bids were received on March 12 by Allen N. Spooner, Comr. Dept. of Docks and Ferries, for Contract No. 1156—Furnishing all the labor and materials required for preparing and refendering Pier 53, North River, in the Boro. of Manhattan, and preparing foundations for street front of bulkhead building, and for preparing and building freight shed on Pier 53, North River, near the foot of Little West Twelfth St., with lateral extension on the adjacent bulkhead platform. Contract has been awarded to the McHARG-BARTON CO., 165 Broadway, New York, at $247,300.

BARGE CANAL.—Albany, N. Y.—Plans and specifications for the improvement of sections of the barge canal, involving an expenditure by the State of between $10,000,000 and $11,000,000 have been submitted by Frank Williams, State Engr., to the Advisory Board of Consulting Engineers for consideration and approval. The proposed work includes: Contract No. 20, dredging a canal in the Mohawk River between Little Falls and Rexford Flats, 58.7 miles; contract No. 23, constructing the land line from King's Bend to the Genesee River, 5.63 miles; contract No. 30, constructing the river and land line from Little Falls to Sterling Creek, 14.62 miles; contract No. 42, construction of canal from the Herkimer-Oneida County line to a point just east of Oriskany Road, 8.96 miles. The total mileage covered by the contracts is 87.91.

U. S. POSSESSIONS AND CUBA.

(denotes that this work is advertised in Engineering News.)*

BRIDGE.—Philippines.—The contract for constructing the Moriones concrete bridge in Tonao has been awarded to the ATLANTIC, GULF & PACIFIC CO., Monadnock Bldg., San Francisco, Cal.

*ROAD MACHINERY.—Hawaii.—Bids are asked by the Supervisors of the County of Kauai, Territory of Hawaii, until May 1, for furnishing traction engine and macadam spreading cars. Prices are requested on engine and cars separately and combined, and must be net f. o. b. steamer at New York and San Francisco. J. H. Moragne is County Engr., Lihue, Kauai, T. H.

*PIPE AND SPECIALS.—Philippines.—Bids are asked by H. L. Fischer, Secy. of the Municipal Bd., Manila, P. I., until noon, June 1, for furnishing c.-i. pipe and specials for the City of Manila, Philippine Islands. The total amount to be furnished will be approximately 7,000 tons of c.-i. pipe, hub and spigot pattern; about 56 tons of 20-in. flexible joint and flange c.-i. pipe; about two tons of flanged c.-i. pipe, and about 200 tons of c.-i. specials. J. F. Case is Ch. Engr., Dept. of Sewer and Water Works Constr. Plans and specifications are on file at the office of Engineering News, New York.

DRY DOCK.—Hawaii.—Bids are asked by R. C. Hollyday, Ch. of Bureau of Yards and Docks, Navy Dept., Washington, D. C., until May 22 for constructing a dry dock at the Naval Station, Pearl Harbor, H. T. Proposals for this work were opened Dec. 1 last, but have been rejected owing to lack of sufficient funds, for the construction of a dock 1,200 ft. long as contemplated by the department. A revision of the plans shortening the dock to 620 ft., therefore, has been made. The structure will be built in such a way that at any future time it may be lengthened by the addition of the inner dock. To accomplish this the side walls of the dock will be built exactly as if the long dock were to be constructed, and a concrete wall will be built across the head end forming a closed basin. This concrete cross wall or head is to be built in such a manner that it can be easily removed.

Readers' Wants

If you are in the market for material, equipment or supplies, and fail to find it in our advertising pages, send us full particulars, and we will gladly put you in touch with the right parties.

CONCRETE MACHINERY.—Point Loma, Cal.—D. Churchill, C. E., writes us for literature concerning concrete machinery and the application of concrete for walls, roofs, etc.

CONSTRUCTION EQUIPMENT. — Amoy, China.—Purnell & Paget, Canton, China, write us for literature and prices C. I. F. Hong Kong or Amoy, on the following equipment: Air compressors, buckets, cableways, caissons, cement-making machinery, concrete mixers and machinery, cranes, stone crushers, derrick and derrick fittings, power transmission machinery, centrifugal pumps and palsometer, shovels and picks, dump wagons, wheelbarrows, wire rope. They are to construct a 950-ft. steel bridge with concrete piers at Amoy, for which this equipment is desired. Their cable address is "Panel," Canton.

EXAMINATIONS.

TRACER.—Panama.—The U. S. Civil Service Commission announces an examination on April 21-22 to secure eligibles from which to make certification to fill vacancies as they may occur in the position of Tracer of mechanical drawings in the Isthmian Canal Service, at an entrance salary of $100 a month. Age limit, 20 to 45 years. Application form 1312.

AID (MALE).—Washington, D. C.—The U. S. Civil Service Commission announces an examination on April 7 to secure eligibles from which to make certification to fill a vacancy in the position of Aid, Division of Mollusks, National Museum, at $60 a month, and vacancies requiring similar qualifications as they may occur. Age limit, 20 years. Application Form 304.

ASSISTANT PHOTOGRAPHER.—Washington, D. C.—The U. S. Civil Service Commission announces an examination on April 21, to secure eligibles from which to make certification to fill a vacancy in the position of Assistant Photographer, at from $900 to $1,200 a year, in the Reclamation Service, and vacancies requiring similar qualifications as they may occur in any branch of the service. Age limit, 20 years. Application Form 1093.

ASSISTANT CHEMIST.—Washington, D. C.—The U. S. Civil Service Commission announces an examination on April 21 to secure eligibles from which to make certification to fill three or more vacancies in the position of Laboratory Assistant (in chemistry) and Assistant Chemist in the Bureau of Standards, at salaries varying from $900 to $1,200 a year for laboratory assistant, and from $1,400 to $1,800 a year for assistant chemist, and vacancies requiring similar qualifications as they may occur. The duties in connection with these positions vary from routine testing to advanced work involving original investigation. As far as practicable, appointees are assigned to work in the subjects for which they are best fitted. Age limit, 20 to 35 years. Application Form 1312. Applications must be filed prior to closing hour on April 10.

JUNIOR CHEMIST (FUELS).—Pittsburg, Pa.—The U. S. Civil Service Commission announces an examination to secure eligibles from which to make certification to fill five vacancies in the position of Junior Chemist (male) in the Geological Survey, at Pittsburg, Pa., at salaries of from $1,020 to $1,500 a year, and vacancies requiring similar qualifications as they may occur in that survey. Applicants for this examination will be examined on or before April 28. In order to secure eligibles with as little delay as possible the Commission will, upon the receipt of applications, examine each applicant as soon as the necessary arrangements can be made, no such examination to be held after April 28. Persons who desire to be examined should file their applications with the Commission on as early a date as possible. Age limit, 21 years. Application Form 1312.

ASSISTANT PHYSICIST.—Washington, D. C.—The U. S. Civil Service Commission announces an examination on April 21 to secure eligibles from which to make certification to fill ten or more vacancies in the positions of Laboratory Assistant (in physics) and Assistant Physicist in the Bureau of Standards, at salaries varying from $900 to $1,200 a year for laboratory assistant, and from $1,400 to $1,800 a year for assistant physicist, and vacancies requiring similar qualifications as they may occur. The duties in connection with these positions are similar to those of assistants in the physical laboratories of scientific and technical institutions. As far as practicable, appointees are asigned to work in the subjects for which they are best fitted. Age limit, 20 to 35 years. Application Form 1312. Applications must be filed prior to closing hour on April 10.

ASSISTANT ELECTRICAL ENGINEER.—Washington, D. C.—The U. S. Civil Service Commission announces an examination on April 21 to secure eligibles from which to make certification to fill a vacancy in the position of Assistant Electrical Engineer, expert in wireless telegraphy, in the Signal Service at Large, at a salary of $1,500 to $1,800 a year, depending upon the experience and qualifications of the appointee, and vacancies requiring similar qualifications as they may occur in any branch of the service. The person appointed to the position for which this examination is held will probably be located for the major portion of his time in Washington, D. C., but he will also be required to travel about the United States visiting wireless telegraph stations, which visits may be of a few days or several months' duration. Age limit, 25 years. Application Form 1312. Applications must be filed prior to closing hour on April 10.

MECHANICAL DRAFTSMAN, TOPOGRAPHIC DRAFTSMAN.—Panama.—The U. S. Civil Service Commission announces examinations on April 14-15 to secure eligibles from which to make certification to fill vacancies as they may occur in the position of Mechanical Draftsman and Topographic Draftsman in the Isthmian Canal Service. The entrance salaries of these positions are as follows: Mechanical Draftsman, first class, $150 a month; second class, $125 a month; Topographic Draftsman, $125 a month; Tracer, $100 a month. Age limit, 20 to 45 years. Application Form 1312. Applications for Mechanical Draftsman must be filed prior to closing hour on April 3, while those for the Topographic Draftsman examination will be accepted if received at the Commission in sufficient time to arrange for the shipment of the necessary examination papers to the places of examination. In applying for these examinations the exact title of the position sought as given should be used in the application.

ASSISTANT GEOLOGIST. — Washington, D. C.—The U. S. Civil Service Commission announces an examination on April 7-8 to secure eligibles from which to make certification to fill vacancies in the position of Assistant Geologist and Junior Geologist in the Geological Survey, at salaries ranging from $1,000 to $1,600 a year, as they may occur. The Department estimates that ten appointments will be made at an early date as a result of this examination, the salary depending upon the experience and qualifications of the eligibles secured. In certain cases where only a portion of the time of the appointee can be given to the work of the Department, the compensation will be upon a per day basis for the service rendered. Employment in the position of temporary Field Assistant will also be made from the resulting eligible list as far as possible. The compensation of such positions ranges from $60 to $100 per month, and the length of employment from three to seven months. Age limit, 20 years. Application Form 1312.

INDUSTRIAL NOTES.

THE WAGNER ELECTRIC MFG. CO. announce the removal of their district office in Pittsburg to the Lewis Block and the appointment of Mr. Ludwig Hommel as district manager.

THE KENNEDY VALVE MFG. CO. announces that Mr. William Martin has joined the forces of the company as Manager of the New York City sales department, with offices at 57 Beekman St.

JOHN W. HELLER, Engineering Contractor, formerly at 21 Gaston St., West Orange, N. J., is now located at 738 Broad St., Room 818, Scheuer Building, Newark, N. J.

THE PODEROSA MINING CO., LTD., of London, England, has acquired the properties of the Compañia Minera Poderosa de Collahursi, Chile, S. A. Mr. Robert Hawxhurst, Jr., M. Am. Inst. M. E., retains his position as General Manager under the new management and will remain at the Poderosa mine, Antofagasta, Chile.

THE PARKER BOILER CO., Penna Bldg., Philadelphia, reports the following recent orders: One 258-HP. boiler for Convent of Good Shepherd, Wheeling, W. Va.; three 300-HP. boilers for Gardner-Harvey Paper Co., Battle Creek, Mich, and two 234-HP. boilers for Mount de Chantal Academy, Wheeling, W. Va. The boiler for the Convent of Good Shepherd is a duplicate of one installed last fall.

(Continued on page 99.)

CONTRACT PRICES.

*CATSKILL AQUEDUCT.—New York, N. Y.—Bids were received on March 9, by the Board of Water Supply, 299 Broadway, New York, for Contract 22, constructing the Bull Hill Tunnel, Hudson River Division, Catskill Aqueduct. Itemized bids were submitted as follows by (A) the Dravo Contracting Co., 814 Lewis Block, Pittsburg, Pa.; (B) the Snare & Triest Co., 143 Liberty St., New York; (C) PATTERSON & CO., 509 Fitzsimmons Bldg., Pittsburg, Pa. (awarded contract); (D) J. C. Rodgers & Co., 121 West 125th St., New York; (E) Bradley Contracting Co., 1 Madison Ave., New York; (F) the Metropolitan Contracting Co., 95 Milk St., Boston, Mass.; (G) Millard Construction Co., Philadelphia, Pa., and 2 Rector St., New York; (H) Gore-Meenan Co., 206 Broadway, New York; (I) Mason & Hanger Co., Richmond, Ky.; (J) The Degnon Contracting Co., 60 Wall St., New York; (K) S. Pearson & Son, Inc., Long Island City, N. Y.; (L) Henry P. Burgard Co., 275 Lathrop Pl., Buffalo, N. Y.; (M) the Phoenix Construction Co., 41 Park Row, New York; (N) American Pipe & Construction Co., 112 North Broad St., Philadelphia, Pa.; (O) the Glyndon Contracting Co., 2 Rector St., New York:

	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
5,000 cu. yds. removal of top-soil	$0.50	$0.70	$0.50	$0.50	$0.60	$0.60	$0.70	$0.60
22,000 cu. yds. open-cut excavation, Station 830 to Station 835 + 55	.95	1.00	1.00	1.00	1.50	1.70	1.20	1.50
48,000 cu. yds. open-cut excavation, Station 889 + 20 to Station 900	.95	1.00	.75	1.00	1.00	1.23	1.20	.50
7,000 cu. yds. open-cut excavation, Station 900 to Station 903 + 50	.95	1.30	1.50	1.00	2.00	2.50	1.20	2.50
8,000 cu. yds. open-cut excavation, Station 903 + 50 to Station 907	.95	1.00	1.50	1.00	1.50	1.95	1.20	1.50
7,000 cu. yds. refilling and embanking, Station 830 to Station 835 + 55	.25	.40	.50	.30	.50	.50	.40	.30
19,000 cu. yds. refilling and embanking, Station 889 + 20 to Station 900	.25	.40	.50	.30	.60	.40	.40	.30
7,000 cu. yds. refilling and embanking, Station 900 to Station 903 + 50	.25	.40	.50	.30	.60	.50	.40	.40
6,000 cu. yds. refilling and embanking, Station 903 + 50 to Station 907	.25	.40	.50	.30	.60	.40	.40	.35
5,000 cu. yds. surface dressing and grassing	.50	.50	.60	.60	.60	.60	1.00	.60
12,500 cu. yds. concrete masonry for aqueduct in open cut and on embankment	5.10	5.80	5.50	5.00	5.00	4.85	6.00	6.00
1,000 cu. yds. concrete masonry for culverts, retaining-walls, etc.	7.00	6.80	6.00	5.00	12.00	5.25	8.00	9.00
1,000 cu. yds. dry rubble masonry and paving	4.00	3.00	4.00	2.50	3.00	4.00	3.50	3.50
200 cu. yds. crushed stone and gravel	1.60	2.00	2.00	1.00	2.00	3.00	2.50	3.50
1 sluice-gate	80.00	80.00	100.00	100.00	125.00	150.00	300.00	150.00
1 ton cast-iron pipes and special pipe castings	100.00	80.00	100.00	100.00	100.00	80.00	100.00	150.00
500 lin. ft. vitrified pipe	1.60	1.50	2.00	1.00	.90	1.00	1.50	1.50
30 M. ft. B. M. timber and lumber	55.00	60.00	60.00	40.00	20.00	70.00	50.00	65.00
3 portions testing portions of aqueduct	800.00	1,000.00	1,000.00	500.00	500.00	1,500.00	1,000.00	1,500.00
1,000 lin. ft. of excess testing portions of aqueduct exceeding 200 ft. in length	3.00	2.00	3.00	2.50	3.00	5.00	4.00	2.00
58,000 cu. yds. rock excavation in tunnel	5.05	6.00	6.00	7.40	7.35	6.50	6.50	7.00
500 sq. yds. additional trimming in tunnel	4.00	4.00	7.00	5.00	12.00	6.50	5.00	7.50
3,200 cu. yds. earth excavation in tunnel	4.00	4.00	4.50	5.00	4.00	6.00	7.00	6.00
100 cu. yds. enlargement of tunnel section in earth	4.00	12.00	5.00	10.00	10.00	10.00	10.00	20.00
250 M. ft. B. M. permanent timbering in tunnel	55.00	70.00	70.00	60.00	20.00	70.00	80.00	80.00
50 M. ft. B. M. temporary timbering in tunnel	60.00	70.00	60.00	30.00	20.00	70.00	50.00	80.00
5,365 lin. ft. of tunnel drainage	1.60	1.50	1.50	.01	2.00	1.00	1.40	1.00
5,365 lin. ft. of tunnel forms for masonry lining in tunnel	3.00	4.00	3.00	3.00	2.00	2.50	4.00	4.00
17,000 cu. yds. concrete masonry in tunnel	5.85	5.50	6.50	5.90	5.00	6.25	6.85	6.50
1,000 cu. yds. excess concrete masonry in tunnel	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50
200 cu. yds. brick masonry in tunnel	16.00	14.00	14.00	7.00	15.00	10.00	20.00	25.00
3,000 cu. yds. dry packing	2.25	2.50	1.50	2.50	2.00	2.50	2.20	2.50
400 lin. ft. drilling holes in rock or masonry	.40	.70	1.50	.50	.50	.50	.50	1.00
1,500 lin. ft. steel pipes for grouting	.25	.40	.50	.20	.50	.50	.30	.60
44,000 bbls. Portland cement	1.70	1.90	1.70	1.50	1.50	2.00	2.00	2.00
1,000 cu. yds. grout of Portland cement	6.25	6.00	8.00	4.00	4.00	8.00	7.00	10.00
6,550 lin. ft. stone boundary walls	1.60	1.20	1.25	1.00	1.00	.80	1.00	1.00
2,500 lin. ft. fences and guard-rails	.40	.40	.35	1.00	.50	.40	.40	.50
15,000 lbs. steel for reinforcing concrete	.03	.04	.06	.04	.05	.04	.10	.06
2,000 lbs. wrought iron, cast iron and steel	.08	.06	.05	.10	.06	.08	.10	.10
1,000 lbs. bronze	.80	.50	.80	1.00	1.00	.50	.50	.60
Cleaning up (lump sum)	4,000.00	3,000.00	5,000.00	1.00	2,500.00	3,000.00	3,000.00	3,000.00
Totals	$738,424	$823,417	$824,942	$852,650	$872,505	$901,232	$915,021	$921,925

	(I)	(J)	(K)	(L)	(M)	(N)	(O)
5,000 cu. yds. removal of top-soil	$0.50	$0.30	$0.40	$1.00	$0.50	$0.75	$0.75
22,000 cu. yds. open-cut excavation, Station 830 to Station 835 + 55	.90	.90	1.35	1.50	5.60	2.00	4.50
48,000 cu. yds. open-cut excavation, Station 889 + 20 to Station 900	.90	.70	.60	1.75	3.00	2.00	2.50
7,000 cu. yds. open-cut excavation, Station 900 to Station 903 + 50	1.25	2.50	1.20	1.75	5.00	2.50	3.50
8,000 cu. yds. open-cut excavation, Station 903 + 50 to Station 907	1.00	2.00	.90	1.75	3.00	1.40	3.50
7,000 cu. yds. refilling and embanking, Station 830 to Station 835 + 55	.40	.40	.46	.40	.35	.50	.84
19,000 cu. yds. refilling and embanking, Station 889 + 20 to Station 900	.40	.50	.46	.40	.55	.50	.84
7,000 cu. yds. refilling and embanking, Station 900 to Station 903 + 50	.50	.75	.46	.40	.55	.50	.84
6,000 cu. yds. refilling and embanking, Station 903 + 50 to Station 907	.40	.75	.46	.40	.55	.50	.84
5,000 cu. yds. surface dressing and grassing	.40	.90	.73	.50	.55	.60	1.20
12,500 cu. yds. concrete masonry for aqueduct in open cut and on embankment	6.75	4.50	7.00	7.11	4.00	7.50	8.25
1,000 cu. yds. concrete masonry for culverts, retaining-walls, etc.	6.75	5.00	8.00	7.00	5.80	10.00	8.25
1,000 cu. yds. dry rubble masonry and paving	3.00	2.50	6.12	3.50	2.50	3.50	3.25
200 cu. yds. crushed stone and gravel	2.00	1.50	1.50	2.50	2.50	2.00	3.00
1 sluice-gate	80.00	100.00	170.00	100.00	100.00	125.00	300.00
1 ton cast-iron pipes and special pipe castings	100.00	100.00	127.50	100.00	100.00	100.00	105.00
500 lin. ft. vitrified pipe	1.50	1.50	1.28	1.00	1.25	1.50	1.00
30 M. ft. B. M. timber and lumber	50.00	60.00	76.50	60.00	75.00	60.00	75.00
3 portions testing portions of aqueduct	800.00	1,500.00	850.00	5,000.00	1,250.00	750.00	1,875.00
1,000 lin. ft. of excess testing portions of aqueduct exceeding 200 ft. in length	3.00	1.00	1.70	5.00	2.50	2.00	1.50
58,000 cu. yds. rock excavation in tunnel	8.00	8.00	7.75	7.25	6.40	7.50	6.75
500 sq. yds. additional trimming in tunnel	5.00	1.00	8.50	9.50	6.25	8.00	1.50
3,200 cu. yds. earth excavation in tunnel	3.00	20.00	5.10	4.75	4.00	10.00	6.75
100 cu. yds. enlargement of tunnel section in earth	3.00	3.00	11.34	9.75	6.25	10.00	7.50
250 M. ft. B. M. permanent timbering in tunnel	50.00	25.00	100.00	65.00	60.00	75.00	60.00
50 M. ft. B. M. temporary timbering in tunnel	50.00	25.00	90.00	55.00	50.00	75.00	60.00
5,365 lin. ft. of tunnel drainage	1.50	1.50	3.00	2.50	1.80	2.00	1.00
5,365 lin. ft. of tunnel forms for masonry lining in tunnel	3.75	4.00	7.00	4.50	5.00	5.00	3.00
17,000 cu. yds. concrete masonry in tunnel	7.00	6.00	5.50	7.25	4.55	6.35	8.25
1,000 cu. yds. excess concrete masonry in tunnel	2.50	2.50	2.50	2.50	2.50	2.50	2.50
200 cu. yds. brick masonry in tunnel	15.00	10.00	25.50	20.00	15.00	15.00	24.00
3,000 cu. yds. dry packing	2.50	2.50	3.00	3.75	3.00	3.00	3.00
400 lin. ft. drilling holes in rock or masonry	.60	.40	.75	.50	.50	.60	1.50
1,500 lin. ft. steel pipes for grouting	.20	.30	.34	.40	.60	.35	.47
44,000 bbls. Portland cement	1.80	1.70	2.45	2.00	1.80	[illegible]	[illegible]
1,000 cu. yds. grout of Portland cement	6.00	6.00	13.75	[illegible]	[illegible]	[illegible]	[illegible]
6,550 lin. ft. stone boundary walls	1.10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2.62½
2,500 lin. ft. fences and guard-rails	[illegible]	[illegible]	.50	.50	.40	.25	.45
15,000 lbs. steel for reinforcing concrete	.05	.04	.06	.05	.05	.05	.06
2,000 lbs. wrought iron, cast iron and steel	.06	.06	.75	.07	.06	.10	.06
1,000 lbs. bronze	.60	.60	.07	.50	.75	1.00	.60
Cleaning up (lump sum)	2,000.00	1,500.00	6,375.00	2,000.00	2,520.00	2,500.00	3,000.00
Totals	$951,581	$959,037	$1,014,651	$1,032,770	$1,049,697	$1,098,085	$1,161,707

Time: 38 months. Bond required: $250,000.

*CATSKILL AQUEDUCT.—New York, N. Y.—Bids were received on March 11 by the Board of Water Supply of the City of New York, for Contract 23, Croton Division, of the Catskill Aqueduct, including [illegible] Tunnels and Yorktown cut-and-cover. The bids in detail were as follows: (A) Robert C. Storrie, Nice Town Lane and G St., Philadelphia, Pa.; (B) Gore-Meenan Co., 206 Broadway, New York; (C) GLYNDON CONTRACTING CO., 2 Rector St., New [illegible] contract); (D) Sundstrom & Stratton, 90 West St., New York; (E) Norton & Brown, 215 West 125th St., New York; (F) Mason & Hanger Co., Richmond, Ky.; (G) Snare & Trist Co., 143 Liberty St., New York; (H) Degnon Contracting Co., 60 Wall St., New York; (I) M. A. Talbott Co., 1110 American Bldg., Baltimore, Md.; (J) John J. Hopper, 215 W. 125th St., New York; (K) J. Connelly Construction Co., 537 Calvert Bldg., Baltimore, Md.; (L) Patrick McGovern, 623 Beacon Bldg., 6 Beacon St., Boston, Mass.; (M) Ferguson Contracting Co., 37 Wall St., New York; (N) S. Pearson & Son, Inc., Long Island City, N. Y.; (O) The American Pipe & Construction Co., 112 North Broad St., Philadelphia, Pa.; (P) J. H. Gray Co., Fuller Bldg., New York:

	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)
23,000 cu. yds. removal of top-soil	$0.40	$0.50	$0.35	$0.50	$0.75	$0.50	$0.70	$0.50	$0.40	$0.35	$0.60	$0.45	$1.00	$0.39	$0.60	$1.00
24,000 cu. yds. open-cut excavation, Station 18 to Station 20, Type A	.51	.50	.60	1.00	.75	.90	.80	.60	1.00	4.10	.85	1.00	.75	.57	1.00	2.00
108,000 cu. yds. open-cut excavation, Station 81 + 50 to Station 107 + 50, Type A	.90	.95	.50	1.00	.75	1.10	1.00	1.00	1.25	.65	1.43	1.40	1.15	.96	1.40	3.00
17,000 cu. yds. open-cut excavation, Station 110 + 50 to Station 120, Type A	1.10	1.50	.65	1.00	.75	1.00	1.50	1.25	2.00	1.40	2.10	1.70	1.50	1.20	1.50	2.50
25,000 cu. yds. open-cut excavation, Station 120 to Station 137, Type B	.85	.95	.45	1.00	.75	1.00	1.00	.75	1.50	1.05	1.43	1.40	1.25	1.28	1.30	2.00
7,000 cu. yds. refilling and embanking, Station 18 to Station 20	.30	.30	.25	.50	.35	.50	.30	.30	.50	.90	.35	.35	.50	.45	.50	.75
42,000 cu. yds. refilling and embanking, Station 81 + 50 to Station 107 + 50	.30	.30	.25	.50	.35	.40	.30	.30	.40	.41	.35	.35	.50	.45	.50	.75
11,000 cu. yds. refilling and embanking, Station 110 + 50 to Station 120	.35	.40	.25	.50	.35	.40	.30	.30	.50	.41	.35	.35	.50	.45	.50	.75
20,000 cu. yds. refilling and embanking, Station 120 to Station 137	.25	.30	.23	.50	.35	.40	.30	.30	.50	.41	.35	.35	.50	.45	.50	.75
15,000 cu. yds. surface dressing and grassing	.75	.50	.50	.50	.50	.40	.40	.75	.60	.60	.60	.60	.75	.69	.60	1.00
25,000 cu. yds. concrete masonry for aqueduct in open cut and on embankment	5.00	4.50	5.25	5.10	5.50	5.50	5.40	5.00	5.00	5.00	5.50	5.25	5.75	6.99	6.50	7.50
400 cu. yds. concrete masonry for culverts, retaining-walls, etc.	6.00	7.00	5.25	7.00	6.00	8.00	6.50	5.50	8.00	8.00	8.00	8.00	6.00	8.00	10.00	12.00
100 cu. yds. rubble masonry and paving in mortar	3.50	4.50	4.00	5.00	4.00	4.00	6.00	3.00	5.00	8.15	9.00	1.75	4.50	6.94	5.00	6.00
400 cu. yds. dry rubble masonry and paving	3.00	2.50	2.50	4.50	3.00	3.00	3.00	2.00	3.50	5.40	4.00	1.75	4.00	5.76	3.50	4.50
5,000 cu. yds. crushed stone, gravel and material for filters	2.00	2.00	2.25	1.50	2.00	2.00	1.80	1.50	2.00	2.70	2.25	2.00	3.00	1.18	2.65	3.00
2 sluice gates	100.00	150.00	125.00	200.00	100.00	80.00	100.00	100.00	150.00	306.00	100.00	50.00	125.00	160.00	125.00	175.00
1 ton cast-iron pipes and special pipe castings	150.00	150.00	100.00	150.00	100.00	100.00	80.00	100.00	100.00	100.00	100.00	75.00	125.00	120.00	100.00	125.00
3,000 lin. ft. vitrified pipe	1.50	1.00	1.00	1.60	1.00	1.50	1.50	1.50	1.50	1.50	1.00	1.00	1.75	1.20	1.50	2.00
30 M. ft. B. M. timber and lumber	50.00	60.00	65.00	50.00	75.00	60.00	60.00	60.00	60.00	55.00	60.00	50.00	60.00	72.00	60.00	75.00
3 portions testing portions of aqueduct	1,000.00	1,200.00	1,000.00	1,000.00	500.00	1,000.00	1,000.00	1,000.00	1,000.00	1,086.00	1,000.00	1,000.00	900.00	800.00	1,000.00	2,000.00
800 lin. ft. of excess testing portions of aqueduct, exceeding 200 ft. in length	2.00	2.00	1.50	4.00	2.00	3.00	2.00	1.00	2.00	5.45	2.00	5.00	3.50	1.60	3.00	5.00
68,000 cu. yds. rock excavation in tunnel	5.10	5.75	6.75	5.60	6.00	6.00	5.90	6.75	6.00	5.90	6.25	6.50	6.50	7.33	7.15	8.60
800 sq. yds. additional trimming in tunnel	5.00	5.00	3.50	4.00	5.00	5.00	4.00	1.00	5.00	4.00	5.00	1.50	5.00	8.00	10.00	10.00
6,000 cu. yds. earth excavation in tunnel	4.00	4.50	3.50	4.00	5.00	4.00	4.00	10.00	4.50	4.00	6.25	6.00	6.00	4.80	7.15	6.00
100 cu. yds. enlargement of tunnel section in earth	15.00	10.00	3.50	5.00	5.00	10.00	12.00	3.00	15.00	67.00	10.00	6.00	5.00	10.67	10.00	10.00
400 M. ft. B. M. permanent timbering in tunnel	50.00	60.00	60.00	60.00	75.00	16.00	70.00	80.00	60.00	89.00	60.00	50.00	75.00	104.00	75.00	75.00
75 M. ft. B. M. temporary timbering in tunnel	50.00	50.00	45.00	50.00	75.00	50.00	70.00	50.00	55.00	89.00	65.00	40.00	60.00	88.00	75.00	80.00
6,450 lin. ft. of tunnel drainage	1.00	1.00	1.00	1.00	3.00	1.50	1.50	1.50	1.50	2.50	1.00	1.25	2.00	2.80	2.00	2.00
6,450 lin. ft. of tunnel forms for masonry lining in tunnel	1.50	3.00	2.75	3.50	2.50	3.75	4.00	3.00	3.00	2.40	3.00	2.50	4.50	6.59	5.00	6.00
20,000 cu. yds. concrete masonry in tunnel	5.25	4.80	5.75	5.60	6.00	6.50	5.00	6.00	6.00	5.85	5.75	6.00	6.50	5.23	6.30	7.50
800 cu. yds. excess concrete masonry in tunnel	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50
200 cu. yds. brick masonry in tunnel	15.00	15.00	18.00	20.00	15.00	15.00	14.00	10.00	20.00	24.00	15.00	17.00	15.00	24.00	15.00	20.00
3,500 cu. yds. dry packing	2.50	2.50	2.50	3.00	2.00	2.00	2.30	2.50	2.00	3.00	2.50	2.00	3.00	2.83	3.00	4.00
200 lin. ft. drilling holes in rock or masonry	1.00	1.00	.60	.50	.50	.60	.70	.40	1.00	2.05	.50	.50	.60	.64	.70	1.00
800 lin. ft. steel pipes for grouting	.50	.50	.50	.35	.30	.30	.40	.30	.50	.55	.50	.25	.30	.32	.35	.50
65,000 bbls. Portland cement	1.70	1.65	1.90	1.70	1.90	1.50	1.90	1.70	1.90	2.40	1.95	1.95	2.00	2.66	2.50	1.90
200 cu. yds. grout of Portland cement	8.00	5.00	6.00	4.00	5.00	6.00	7.00	6.00	8.00	10.00	8.00	5.00	6.00	12.99	10.00	10.00
14,000 lin. ft. stone boundary walls	1.25	.90	1.25	1.00	1.50	1.10	1.20	.75	1.00	.90	1.00	1.75	2.50	1.41	1.25	2.50
5,000 lin. ft. fences and guard-rails	.50	.40	.42	.50	.30	.40	.40	.40	.30	.35	.40	.30	.50	.37	.25	.50
30,000 lbs. stel for reinforcing concrete	.05	.05	.05	.04	.04	.06	.04	.05	.05	.05	.05	.05	.06	.06½	.05	.07
2,000 lbs. wrought-iron, cast-iron and steel	.10	.08	.06	.10	.09	.06	.06	.06	.06	.14	.10	.05	.06	.70	.10	.08
1,000 lbs. bronze	.70	.60	.60	1.00	.75	.60	.50	.60	.75	.55	.60	.50	1.00	.92	1.00	1.00
42 months medical and surgical practitioners	150.00	200.00	125.00	200.00	150.00	200.00	150.00	125.00	100.00	275.00	300.00	300.00	600.00	250.00	500.00	200.00
42 months sanitary services	150.00	300.00	200.00	200.00	50.00	225.00	400.00	150.00	100.00	210.00	200.00	250.00	500.00	250.00	500.00	1,500.00
Cleaning up (lump sum)	3,000.00	1,500.00	3,000.00	2,500.00	10,000.00	2,000.00	4,000.00	2,000.00	5,000.00	10,000.00	1,000.00	10,000.00	5,000.00	9,000.00	2,500.00	5,000.00
Totals	$1,028,915	$1,079,660	$1,109,102	$1,129,850	$1,156,870	$1,156,702	$1,167,605	$1,215,265	$1,223,520	$1,280,265	$1,281,315*	$1,292,087	$1,376,930	$1,418,327	$1,480,945	$1,921,585

Time: 42 months. Bond required: $240,000.
The Bradley Contracting Co., 1 Madison Ave., New York, submitted a blank bid.

INDUSTRIAL NOTES.

(Continued from page 98.)

THE GRAND CANYON ELECTRIC LIGHT & POWER CO., Williams, Ariz., has awarded contract to the National Wood Pipe Co., Los Angeles, Cal., for 15,000 ft. of 4, 6 and 8-in. machine-banded redwood pipe with ast-iron collars. Contract also includes fire hydrants and fittings. A complete water system will be installed.

THE ELECTRIC WELDING CO., of Pittsburg, announces that it has taken over the sole sales agency of the Cummings system of steel reinforcement for reinforced concrete formerly held by Goff-Horner & Co., Frick Bldg., Pittsburg. In addition the company will also place on the market the Dudley deformed bar.

THE HARWOOD ELECTRIC POWER CO., Hazleton, Pa., is now putting in foundations for a large power station at Harwood Mines near Hazleton. Four turbines and boilers have been installed, and put in operation. The plans and specifications, by Scofield Engineering Co., Consulting Engineers, Arcade Building, Philadelphia, are practically completed.

THE CUTLER-HAMMER MFG. CO., of Milwaukee, makers of electric controlling devices, announces the opening of a district office in Cleveland, Ohio, at 1108 Schofield Bldg. The new office will be in charge of Mr. C. J. Kruse, who comes from the engineering department of the Cutler-Hammer Co., and who is well qualified to advise regarding the proper device to use in any case involving the control of electric motors.

THE PORTLAND WOOD PIPE CO., 301 Beck Bldg., Portland, Ore., has been incorporated, organized and established for the purpose of manufacturing Wood Stave Pipe of selected Oregon or Douglas Fir. Machine banded wire wound pipe will be manufactured at the factory in sizes from 2 ins. to 24 ins. in diameter, made in commercial lengths, ready to ship to destination for installation. The company will also contract to furnish material and erect continuous stave pipe in any size from 12 ins. to 12 ft. in diameter, shipping the material to destination, and assembling the pipe on the ground, using individual steel rods for the banding.

For other Proposal Advertisements see pages 43, 44, 46, 48, of Advertisements and Construction News page 100.

WATER-WORKS IMPROVEMENT.

Rome, N. Y.

Sealed proposals will be received by the Board of Water and Sewer Commissioners of the City of Rome, N. Y., until 12 o'clock noon on the 21st day of April, 1909, for the laying of about 28,553 feet of 30-inch, 2,025 feet of 24-inch and 780 feet of 20-inch cast-iron pipe, also the furnishing of valves and hydrants for this line, all as shown on the plans or called for in the specifications.

Plans can be seen and specifications obtained at the office of the Board, or Knight & Hopkins, Engineers, Rome, N. Y.

The Board hereby reserves the right to reject any or all bids, or accept any that in their judgment will be for the best interest of the city.

A bond satisfactory to the Board in amount and sureties will be required of those to whom the contract may be awarded.

Cash or certified check, made payable to the order of the Board of Water Commissioners of Rome, N. Y., to the amount of $500 must be deposited by each bidder on the pipe laying and to the amount of $200 by each bidder on the furnishing of valves and hydrants and accompany his bid as a guarantee that in case the contract is awarded him he will, within seven days thereafter, execute such contract.

Bids must be sealed and addressed to the Board of Water and Sewer Commissioners, Rome, N. Y., and marked on the outside of the envelope enclosing them, "Proposals for Water Works Improvements."

BOARD OF WATER AND SEWER COMMISSIONERS.
Harvey S. Bedell, Chairman,
Barton Haselton,
H. W. Barnard,
J. T. Wiggins,
Ray Armstrong, Clerk.

GRAVEL ROAD.

Freehold, N. J.

Sealed proposals to build a gravel road under the provisions of the New Jersey State Aid Road laws. In the Township of Upper Freehold, Monmouth County, extending from Allentown to Imlaystown (3,725-1,000) miles long, will be received by the Board of Chosen Freeholders of the County of Monmouth at their office in the Court House at Freehold, N. J.,

on the 14th day of April, A. D. 1909, at eleven o'clock A. M., and then and there publicly opened.

Plans and specifications may be seen at the office of the Board of Chosen Freeholders in the Court House, Freehold, N. J., or Peter Forman, Engineer, Englishtown, N. J., or the State Commissioner of Public Roads, State House, Trenton, N. J. Specifications may be obtained by addressing Geo. W. Patterson, Jr., Clerk of the Board, Freehold, N. J. Information regarding the road may also be obtained of Elmer E. Polhemus, Freeholder, Cream Ridge, N. J.

Each bidder must accompany his bid with his check duly certified for one thousand dollars ($1,000.00) payable to the order of the Director of the Board of Chosen Freeholders as a guarantee if said contract is awarded to him he will enter into an agreement with the said Board for the due and faithful performance of the work, which agreement must be executed, together with the bond of the successful bidder, within twenty days from the time of awarding the contract in the penal sum of at least the total estimated cost of the work, with two or more Freeholders or a good and sufficient Surety or Trust Company as sureties, all to be first approved by the State Commissioner of Public Roads and the Director of the Board of Freeholders, and conditioned for the faithful performance of the work, in strict conformity with the plans and specifications.

Checks will be returned to the unsuccessful bidders upon award of the contract, not exceeding ten (10) days from the date of receiving the bids.

The Board reserves the right to reject any or all bids in their discretion.

WM. B. CONOVER,
Director.

PETER FORMAN,
Engineer.

Attest:
GEO. W. PATTERSON, Jr.,
Clerk of the Board.

Dated March 24, 1909.

SEWERS.

Carlstadt, N. J., March 24th, 1909.

Sealed proposals will be received by the Mayor and Borough Council of the Borough of Carlstadt, N. J., on Thursday evening, April 15th, 1909, at 8.15 P. M., at the Borough Hall, on Third Street, Carlstadt, for the construction of a system of Sanitary Sewers and a Sewage Disposal Plant, in and for the Borough of Carlstadt.

The work will comprise approximately 14 miles of 8" to 9" sewers and 14 miles of 6" house connections, with manholes, flush-tanks, pumping station and settling basins. Copies of specifications and forms of proposal may be obtained, and plans may be seen at the office of the Mayor on Hackensack Street, at the house of the Clerk, 47 Second Street, both in Carlstadt, and at the office of Wise & Watson, Consulting Engineers, Rutherford, N. J.

Bids will be received for the whole work contemplated or for either the sewerage work or the disposal plant separately; but bids for a part of the whole must be considered in reference to other bids for the remainder of the work.

Each bid must be accompanied by a certified check in the sum of $2,500.00, made payable to the Collector of the Borough, as a guarantee that the bidder, if his bid be accepted, will enter into contract, and execute a Surety Bond, of a Surety Company authorized to do business in this State, in the sum of fifty per centum of the amount of the bid for the full and faithful completion of the work bid upon, within ten days after notice of the award, otherwise the said check and the sum represented by said check is to be forfeited to the Borough of Carlstadt, as liquidated damages incurred by reason of failure so to contract.

The Borough reserves the right to reject any or all bids and in the case of the pumping plant to substitute some other method or device for pumping the sewage and to that extent diminish the work bid upon.

GEORGE ZIMMERMANN,
Mayor.

EDWARD FORTENBACH,
Clerk.

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., March 22, 1909.—Sealed proposals will be received at this office until 3 o'clock P. M. on the 1st day of May, 1909, and then opened, for the construction (including plumbing, gas piping, heating apparatus, electric conduits and wiring), of the U. S. Post Office, Michigan City, Indiana, in accordance with the drawings and specification, copies of which may be had from the Custodian of the site at Michigan City, Ind., or at this office, at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect.

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., March 23, 1909.—Sealed proposals will be received at this office until 3 o'clock P. M. on the 23d day of April, 1909, and then opened, for the installation of a conduit and wiring system, and extension of the present gas-piping system, in the U. S. Post Office, Court House and Custom House at Newbern, North Carolina, in accordance with drawings and specification, copies of which may be had at this office or at the office of the Custodian. JAMES KNOX TAYLOR, Supervising Architect.

Situations Wanted

Mechanical and Electrical Engineers.

MECHANICAL ENGINEER, Stevens graduate, 25, married, desires change, Southern industrial company, textile mills, steel works; good organizer, investigator; can handle men. Address "W. B. 10," Engineering News, New York. 12-2t

Civil Engineers.

ASSISTANT ENGINEER, age 29, experienced in street, pipe line, subdivision, topographical and land surveys; good plain draftsman; new outfit. Address "R. A. 12," Engineering News, New York. 12-4t

$200 PER MONTH on start will be considered by engineer experienced in routine and executive engineering on large railroads, steel structures, office and mill buildings, mechanical engineering and special problems. Position of initiative and executive responsibility desired. Experienced in modern methods, handling men and field work. Young, progressive and used to authority. Past four years assistant engineer on one hundred million dollar contract. Address "X. B. 12," Engineering News, New York. 12-1t

CIVIL ENGINEER, soon at liberty, desires responsible position in U. C., Canada or Mexico. Graduate, twenty years' experience railway location and construction, sewers, municipal work, water supply and power, and industrial plant. Best references. Address "W. B. 12," Engineering News, New York. 12-5t

ASSISTANT RESIDENT ENGINEER, four years' experience in railroad work, construction and maintenance, desires position. Good draftsman and instrumentman. Will work at anything. Location no object. Address "B. 7," Engineering News, New York. 12-1t

FIRST CLASS MAINTENANCE ENGINEER open to engagement; graduate C. E.; M. Am. Soc. C. E.; 20 years' experience on best roads; practical trackman; experienced in construction, maintenance, operation, organization and economy; best references. Address "M. A. 12," Engineering News, New York. 12-6t

Surveyors.

I. C. S. STUDENT desires position as rodman or chainman. No experience but very willing. Will go anywhere. Address "G. 8," Engineering News, New York. 12-5t

RODMAN, with 3 years' practical experience, desires position; 2 years college; run instruments; go anywhere. Address "D. A. 6," Engineering News, New York. 12-1t

Draftsmen.

DRAFTSMAN, structural, technical education, neat and accurate, ready immediately, vicinity New York; salary, $25. Address "P. A. 12," Engineering News, New York. 12-1t

DRAFTSMAN and surveyor for landscape architects or in any civil engineering office or field, desires position; experience. Address "L. B. 11," Engineering News, New York. 12-1t

DRAFTSMAN, Architectural Engineer, first-class, wishes position in South or West with firm of engineers or architects. Industrial plants, power-houses and mill buildings. Will pay own expenses to any part of U. S. Address "D. B. 12," Engineering News, New York. 12-1t

DRAFTSMAN and engineer, expert on railway construction and maintenance; can take charge in office or field; have all instruments. Address "S. B. 12," Engineering News, New York. 12-2t

Superintendents, Misc., etc.

YOUNG MAN desires position with engineer or contractor; three years' training and two years in field and office; salary secondary to opportunity. Address "G. A. 12," Engineering News, New York. 12-3t

SUPERINTENDENT, with twenty years' experience with asphalt company, desires position with company in need of one or more good men, thoroughly competent to take charge. Address "D. A. 12," Engineering News, New York. 12-1t

SUPERINTENDENT or foreman, familiar with heavy construction, tunnel, or difficult foundation work in all its phases. Economical, of proven executive ability, familiar with labor costs, distribution, etc. Address "H. A. 12," Engineering News, New York. 12-3t

ENGINEER, Superintendent, Master Mechanic, strictly first class, thoroughly practical; seventeen years' general machinery, concrete, timber structures, street railroads; wants position requiring brains, practical knowledge, executive ability; technical education. Address "Z. B. 12," Engineering News, New York. 12-6t

TIMEKEEPER or gang foreman position wanted. Am 30 years old, can speak and write English and Italian; long experience in construction work; A1 references. Address JNO. P. GASPARINI, c/o Y. M. C. A., Wilmington, Del. 12-1t

REINFORCED COCRETE ENGINEER (34) of wide experience in designing, estimating and detailing of all kinds of reinforced concrete construction, open for engagement. Address "B. B. 12," Engineering News, New York. 12-1t

FOREMAN wants position in charge concrete foundation, excavation, sewer, rock, water-works, general construction; go anywhere. Address "C. C. 10," Engineering News, New York. 12-1t

CONCRETE or Construction Foreman with long experience on reinforced concrete buildings and other lines of construction, able to work from blue print. Can show results. A1 reference. Address "E. 10," Engineering News, New York. 12-2t

Situations Open

YOUNG MAN, technical graduate, as assistant to New York structural engineer and contractor. Salary, $75.00 per month; chance for advancement. Give full experience, references, etc. Address "O. A. 12," Engineering News, New York. 12-2t

DRAFTSMEN WANTED on structural steel work for buildings. Apply by mail only, giving age, nationality, education, experience and salary expected. POST & McCORD, 44 East 23d St., New York. 12-4t

WANTED—Structural draftsmen and designers. Apply by letter. N. Y. C. & H. R. R. R., C. P. Marsh, Bridge Engineer, 335 Madison Ave., N. Y. City. 12-2t

2 Good Men Wanted in China

to undertake the general management of the construction of a 310 meter bridge under direct supervision of the engineers having the work in charge.

CIVIL ENGINEER

to take charge of coffer dam of sheet piling; concrete caisson work; air compressor work; cut stone and concrete for piers and erection of steel bridge work.

MECHANICAL ENGINEER

to take charge of steam boilers and engines; cable transporters; stone crushers; air compressors, etc.

Will refund passage money to Hong Kong three months after arrival. Salary to start on arrival in Hong Kong. Return fare not to be paid.

Give full particulars as to experience; quote references with names; state salary expected per month in U. S. currency, and when able to leave for China.

Advertiser refers by permission to Engineering News. Address replies to "F. W. F.," Engineering News, 220 Broadway, New York.

FOR SA[illegible]E

FOR SAL[illegible]

Two **Ingersoll Comp[illegible]ors,** Class "A-1," 20" steam cylin[illegible] 20¼" air cylinder, 24" stroke, 94 R[illegible] M. Rated capacity, 807 cu. ft. of [illegible] air per minute to 100 lbs. termi[illegible] air pressure. Also about **16,000** [illegible]t **pipe,** 1" to 8", Expansion Joints, [illegible]ves, Tees and Reducers for same.

FRED T. LEY & C[illegible]NC.,
Springfield, Ma[illegible] 12-2t

FOR SALE

1 Drake continuous concrete [illegible]r, direct connected with 16 HP. gaso[illegible] engine.

1 Smith concrete mixer No. 2½ [illegible]ounted on truck, direct connected w[illegible] 20 HP. D. C. General Electric moto[illegible]

3 Smith concrete mixers, No. 2[illegible] mounted on truck.

1 Smith concrete mixer, No. 2[illegible] mounted on skids.

1 Flory engine, double cylind[illegible], double drum, 20 HP.

2 American engines, double cylin[illegible]er, double drum, 20 HP.

PACIFIC STATES SUPPLY CO.,
1049 Howard St., San Francis[illegible], Cal.
12-1t

WANTED.

GYRATORY CRUSHER

with elevator and screen. Must have 250 daily capacity and be in first class condition. Give full particulars and lowest cash price.

MUNJOY GRAVEL CO.,
Portland, Me. 12-1t

FOR SALE

One 8 x 8

McKeirnan Drill Belt Compressor

Write DOVER, ROCKAWAY & PT. ORAM GAS CO., Dover, N. J. 12-1t

LIMESTONE QUARRIES

High grade Calcite for Portland Cement. Limestone for Fluxing. Dolomite. Situated between Ogdensburg and Franklin Furnace, Sussex Co., N. J., on Lackawanna and New York, Susquehanna and Western Railroads. Will lease on royalty for long or short terms as desired.

JOHN C. KIRTLAND,
12-4t e.o.w. East Orange, N. J.

Electrical Equipment For Sale

1 450-KW. G. E. Generator, 13,200 volts, 25-cycle, three-phase, direct connected to a Slater cross-compound Corliss-type Engine, 20 x 38 x 42, complete with exciter, switchboard, condensing apparatus and 420-HP. A. & T. B. and W. Type Boiler.

FT. WAYNE & WABASH VALLEY TRACTION CO.,
Ft. Wayne, Indiana. 12-3t

FOR SALE.

3 Hoisting Engines, 5 Ransome Concrete Mixers, 2 Steel Derricks, and about a mile of industrial railway, with cars, for sale at 60% of original cost. Room No. 5213, Metropolitan Life Building, New York City. 12-2t

FOR SALE

54—12 Yd. Standard Gauge Western Dump Cars fitted with air brakes.

2—Imperial type No. 10 Rand Air Compressors, with fittings complete, 1700 C. F. capacity.

34—Rand Rock Drills, No. 3¼, complete with tripods and weights.

G. M. WISNER

Care of Sanitary District of Chicago, 1500 American Trust Bldg.
CHICAGO ILL. 12-1t